AOC-S3108L-H8iR

User's Guide

Revision 1.0

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WARNING: Handling of lead solder materials used in this product may expose you to lead, a chemical known to the State of California to cause birth defects and other reproductive harm.

Preface

About this User's Guide

This user's guide is written for system integrators, IT professionals, and knowledgeable end users. It provides information for the installation and use of the AOC-S3108L-H8iR add-on card.

An Important Note to the User

All images and layouts shown in this user's guide are based upon the latest PCB revision available at the time of publishing of this user guide. The add-on card you have received may or may not look exactly the same as the graphics shown in this user's guide.

Returning Merchandise for Service

A receipt or copy of your invoice marked with the date of purchase is required before any warranty service will be rendered. You can obtain service by calling your vendor for a Returned Merchandise Authorization (RMA) number. When returning to the manufacturer, the RMA number should be prominently displayed on the outside of the shipping carton and mailed prepaid or hand-carried. Shipping and handling charges will be applied for all orders that must be mailed when service is complete.

For faster service, RMA authorizations may be requested online (http://www.super-micro.com/support/rma/).

This warranty only covers normal consumer use and does not cover damages incurred in shipping or from failure due to the alteration, misuse, abuse or improper maintenance of products.

During the warranty period, contact your distributor first for any product problems.

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Conventions Used in the User's Guide

Pay special attention to the following symbols for proper system installation:

Warning: Important information given to ensure proper system installation and to avoid causing damage to the components or causing injury to yourself.

🖉 **Note:** Additional information given for proper system setup.

Important Links

For your system to work properly, please follow the links below to download all necessary drivers/utilities and the user's manual for your server.

- Supermicro product manuals: http://www.supermicro.com/support/manuals/

- Product drivers and utilities: ftp://ftp.supermicro.com

- Product safety info: http://www.supermicro.com/about/policies/safety_information.cfm

- If you have any questions, please contact our support team at: support@supermicro.com

This manual may be periodically updated without notice. Please check the Supermicro website for possible updates to the manual revision level.

Contacting Supermicro

Headquarters

Address:	Super Micro Computer, Inc.
	980 Rock Ave.
	San Jose, CA 95131 U.S.A.
Tel:	+1 (408) 503-8000
Fax:	+1 (408) 503-8008
Email:	marketing@supermicro.com (General Information)
	support@supermicro.com (Technical Support)
Web Site:	www.supermicro.com

Europe

Address:	Super Micro Computer B.V.
	Het Sterrenbeeld 28, 5215 ML
	's-Hertogenbosch, The Netherlands
Tel:	+31 (0) 73-6400390
Fax:	+31 (0) 73-6416525
Email:	sales@supermicro.nl (General Information)
	support@supermicro.nl (Technical Support)
	rma@supermicro.nl (Customer Support)
Web Site:	www.supermicro.nl

Asia-Pacific

Address:	Super Micro Computer, Inc.
	3F, No. 150, Jian 1st Rd.
	Zhonghe Dist., New Taipei City 235
	Taiwan (R.O.C)
Tel:	+886-(2) 8226-3990
Fax:	+886-(2) 8226-3992
Email:	support@supermicro.com.tw
Web Site:	www.supermicro.com.tw

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Chapter 1

Introduction

1-1 Overview

Congratulations on purchasing your add-on card from an acknowledged leader in the industry. Supermicro products are designed with the utmost attention to detail to provide you with the highest standards in quality and performance.

1-2 About this Add-on Card

The Supermicro AOC-S3108L-H8iR is the most technological-advanced, cost-effective, and reliable SAS MegaRAID adapter in today's market. With the Avago 3108 SAS controller, eight 12Gb/s SAS connectors, and a low-profile PCI-E Gen.3 x8 slot built in, this add-on card offers high-performance connectivity with enormous storage capacity to meet the growing needs of enterprise server platforms.

With the optional Supercap/TFM unit built-in, the AOC-S3108L-H8iR supports 2GB DDR3 on-card cache at a speed of 1866 MHz (maximum), providing cached data protection during catastrophic system failures.

In addition, the embedded Avago SAS 3108 I/O processor offers optimal RAID performance and a PCI-Express host interface for increased I/O bandwidth. The AOC-S3108L-H8iR adapter delivers an intelligent and robust RAID solution to the market. For more information regarding product support or updates, please refer to our website at http://www.supermicro.com/products/accessories/addon/aoc-s3108l-h8ir.cfm.

1-3 Key Features

The key features of this add-on card include the following:

- Avago SAS 3108 8-port PCI-E SAS-3.0 controller

- Eight internal SAS3 ports w/two mini SAS HD connectors

- Hardware RAID 0, 1, 5, 6,10, 50, and 60 supported

- Onboard hardware I/O processor

- Supports up to 240 physical devices

- 2GB DDR3 ECC Unbuffered on-card cache with a speed of up to 1866MHz for cached data protection

- Advanced array configuration and management utilities

- Automatically-negotiated PCI-E link widths

- Port-independent auto-negotiation

- Supports SSP, SMP, STP and SATA protocols

- Optional Supercap/CacheVault BTR-TFM8G-LSICVM02 (Installation kit PN=MCP-240-001270N)

- Supports MegaRAID Storage Manager software

- Enlarged venting hole mounting bracket for improved airflow

- Supports 1.5, 3.0, 6.0 and 12.0 Gb/s SAS and 3.0 & 6.0 Gb SATA data transfer rates

- OS support: Windows 2012, 2k8 64/32-bit, RedHat Enterprise, and SUSE Linux

- Support Fastpath(Free) and Cachecade (AOC-CHCD-PRO2-ESW)

- Power consumption: 23 watts

- Operation temperatures: 0°C to 55°C (32°F to 131°F)

- Dimensions 2.71" (H) x 6.6" (L) (68.83cm (H) x 167.64cm (L))

1-4   Supermicro Motherboard Support

This add-on card supports the following motherboards:

- X10SDV-TLN4F

- X10SRA-F

- X10SRD-F

- X10SRG-F
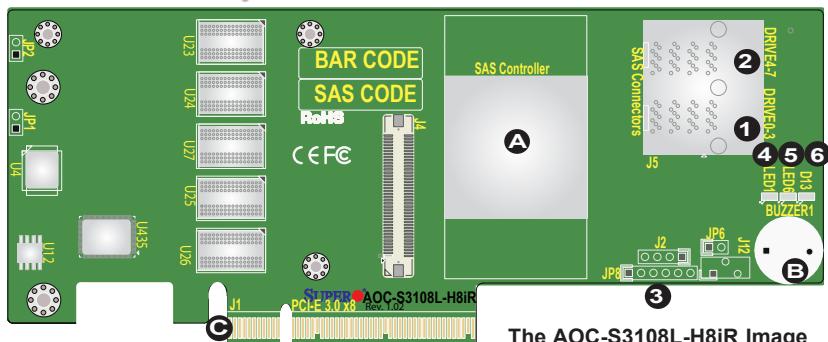
- X10SRH-CF

- X10SRH-CLN4F

- X10SRi-F

- X10SRL-F

- X10SRW-F

- X10DAi

- X10DAC

- X10DAX

- X10DAL-i

- X10DRC-T4+

- X10DRC-LN4+

- X10DRi-T4+

- X10DRi-LN4+

- X10DRD-iNTP

- X10DRD-LTP

- X10DRFF-C

- X10DRFR-T

- X10DRT-P

- X10DRG-Q

- X10DRH-C

- X10DRH-iT

- X10DRi-T

- X10DRL-CT

- X10DRL-i

- X10DRT-L

- X10DRT-LIBQ

- X10DRT-LIBF

- X10DRU-i+

- X10DRW-E

- X10DRW-N

- X10DRX

Chapter 2

Hardware Components

2-1 Add-On Card Image and Layout

The AOC-S3108L-H8iR Image

The AOC-S3108L-H8iR Image

2-2 Major Onboard Components

The following major components are installed on the AOC-S3108L-H8iR:

| Major Components					
No	Component Name	No	Component Name	No	Component Name
A	3108 SAS CTRL	1	SAS ports 0~3	4	LED1: Activity LED
B	Onboard Buzzer	2	SAS ports 4~7	5	LED6: Fault LED
C	PCI-E 3.0 x8 slot	3	CPLD JTAG (header)	6	D13: System Heartbeat LED

2-3   SAS 3.0 Ports and CPLD JTAG Header
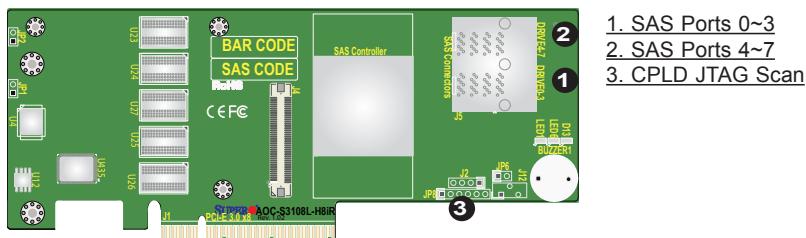
SAS Ports

Eight SAS ports, supported by the Avago 3108 SAS controller, are located on the add-on card. SAS 0-3 and SAS 4-7 support SAS 3.0 connections. See the table below for pin definitions.

SAS 3.0 Pin Definitions	
Pin#	Signal
1	Ground
2	SATA_TXP
3	SATA_TXN
4	Ground
5	SATA_RXN
6	SATA_RXP
7	Ground

CPLD JTAG Header

A 6-pin CPLD JTAG header, located at JP8, is used to scan complex-programmable logic devices. Connect a cable to JP8 for CPLD JTAG scan to enhance system security and data integrity. See the layout below for the location.


1. SAS Ports 0~3
2. SAS Ports 4~7
3. CPLD JTAG Scan

2-4   LED Indicators

SAS Activity LED

The SAS Activity LED is located at LED1 on the add-on card. When LED1 is blinking, the SAS connections supported by the Avago 3108 controller are active. See the table below for more information.

| SAS Activity LED Status	
Color/State	Definition
Green: Blinking	SAS: Active

SAS Fault LED
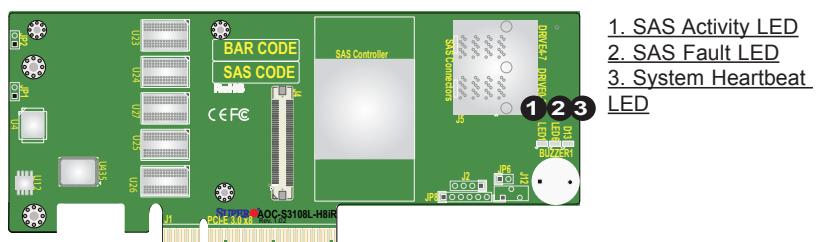
LED6 is used to indicate if a SAS failure has occurred. When LED6 is on, an error has occurred to on-card SAS connections. See the table below for more information.

SAS Fault LED Status	
Color/State	Definition
Red: On	SAS Error(s) detected

System Heartbeat LED

The System Heartbeat LED is located at D13 on the add-on card. When D13 is blinking, the system is functioning normally. See the table below for more information.

System Heartbeat LED Status	
Color/State	Definition
Green: Blinking	System: Normal
Off or Red	System: Disabled or Failed

1. SAS Activity LED
2. SAS Fault LED
3. System Heartbeat LED

Notes

Chapter 3

Installation

> **Note**: Your system came with the AOC--S3108L-H8iR adapter pre-installed as a part of an integrated solution. We do not recommend that any part of your system components be removed and re-installed. However, if you do need to remove or re-install a system component, including this add-on card, please follow the instructions below to ensure proper system setup. Also, be sure to remove the power cord first before adding, removing or changing any hardware components to avoid damaging the system or components.

3-1   Static-Sensitive Devices

Electrostatic Discharge (ESD) can damage electronic components. To avoid damaging your add-on card, it is important to handle it very carefully. The following measures are generally sufficient to protect your equipment from ESD.

Precautions

- Use a grounded wrist strap designed to prevent static discharge.

- Touch a grounded metal object before removing the add-on card from the antistatic bag.

- Handle the add-on card by its edges only; do not touch its components, or peripheral chips.

- Put the add-on card back into the antistatic bags when not in use.

- For grounding purposes, make sure that your system chassis provides excellent conductivity between the power supply, the case, the mounting fasteners and the add-on card.

3-2   Before Installation

To install the add-on card properly, be sure to follow the instructions below.

1. Power down the system.

2. Remove the power cord from the wall socket.

3. Use industry-standard anti-static equipment (such as gloves or wrist strap) and follow the instructions listed on Page 3-1 to avoid damage caused by ESD.

4. Familiarize yourself with the server, motherboard, and/or chassis documentation.

5. Make sure that your operating system includes the latest updates and hot-fixes.

3-3   Installing the Add-on Card

Follow the steps below to install the add-on card into your system.

1. Remove the server cover and, if necessary, set aside any screws for later use.

2. Remove the add-on card slot cover. If the case requires a screw, place the screw aside for later use.

3. Position the add-on card in the slot directly over the connector, and gently push down on both sides of the card until it slides into the PCI connector.

4. Secure the add-on card to the chassis. If required, use the screw that you previously removed.

5. Attach any necessary external cables to the add-on card.

6. Replace the chassis cover.

7. Plug the power cord into the wall socket, and power up the system.

Chapter 4

Configuring the Avago MegaRAID Setting

This chapter provides instructions on how to configure MegaRAID settings for the Avago 3108 SAS controller. If you do not wish to configure MegaRAID settings, skip this section and go directly to OS installation.

4-1   RAID Minimum Drive Requirements

The AOC-S3108L-H8iR add-on card supports up to 240 HDD with RAID 0, 1, 5, 6, 10, 50 and 60. Use the table below to determine the minimum number of hard drives needed to set up a RAID environment.

RAID	Minimum Hard Drives
RAID 0	2
RAID 1	2
RAID 5	3
RAID 6	3
RAID 10	4 (Two RAID 1 arrays)
RAID 50	6 (Two RAID 5 arrays)
RAID 60	6 (Two RAID 6 arrays)

4-2 Using the Avagp MegaRAID Configuration Utility

Follow the steps below to start the Avago MegaRAID Configuration Utility.

1. Power on the system.

2. Press <Ctrl><R> to enter the Avago MegaRAID Configuration Utility when the following screen displays.

```
AVAGO MegaRAID SAS-MFI BIOS
Version 6.25.03.0 (Build April 10, 2015)
Copyright(c) 2015 AVAGO Technologies
HA -0 (Bus 3 Dev 0) AVAGO 3108 MegaRAID
FW package: 24.9.0-0022

Battery Status: Missing
PCI Slot Number: 0

ID LUN VENDOR    PRODUCT                      REVISION        CAPACITY
-- --- ------    -------                      --------        --------
    AVAGO     AVAGO 3108 MegaRAID          4.290.00-4536   2048MB
0  0  HITACHI   HUC103030CSS600              A540            286168MB
1  0  HITACHI   HUC103030CSS600              A540            286168MB
    0  AVAGO     Virtual Drive                RAID1           285632MB

1 Virtual Drive(s) found on the host adapter.
1 Virtual Drive(s) handled by BIOS

Press <Ctrl><R> to Run MegaRAID Configuration Utility
_
```
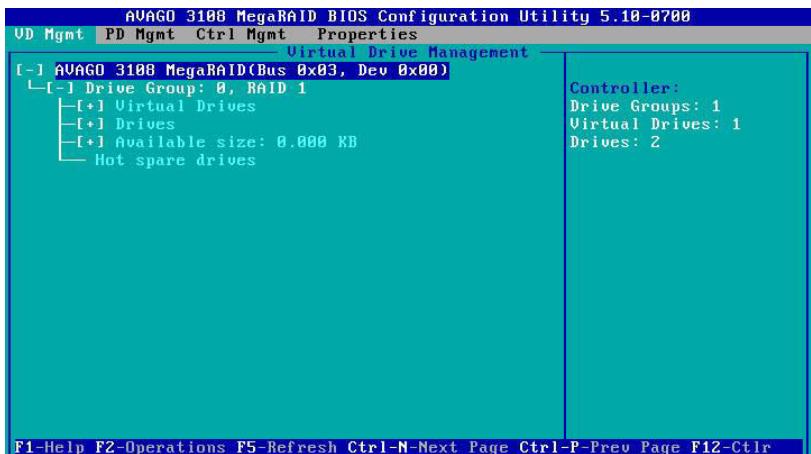
4-3   The Avago MegaRAID Main Screen

On the top of the Avago MegaRAID main screen is a list of configurable menus. Press <Ctrl><N> or <Ctrl><P> to select the menu. The main screen includes the following menus:
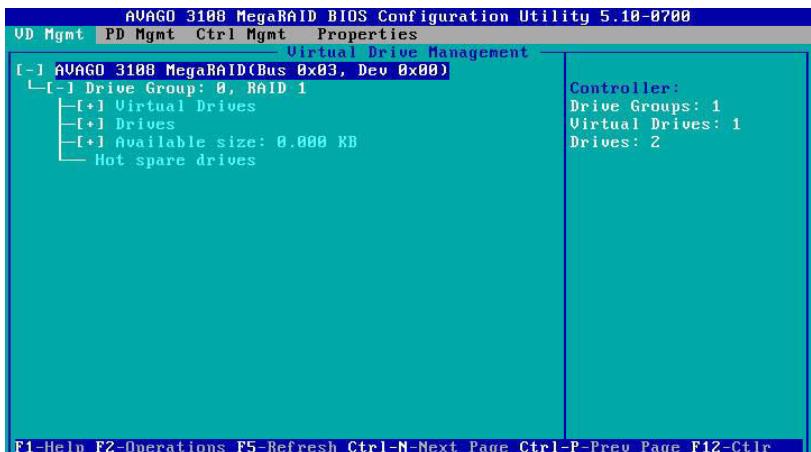
• VD Mgmt (Virtual Drive Management)

• PD Mgmt (Physical Management)

• Ctrl Mgmt (Controller Management)

• Properties

• Foreign View

Avago MegaRAID Configuration Utility Main Screen

4-4   VD Mgmt (Virtual Drive Management)

When you enter the MegaRAID Configuration Utility, the VD Mgmt is the first menu screen that displays, as shown below. This screen provides information about the configuration of controllers, drive groups, and virtual drives. The right panel of the screen displays the information about the selected device. To select a submenu item, use the up arrow and down arrow keys. Use the right arrow to open a submenu, and the left arrow to close a submenu.
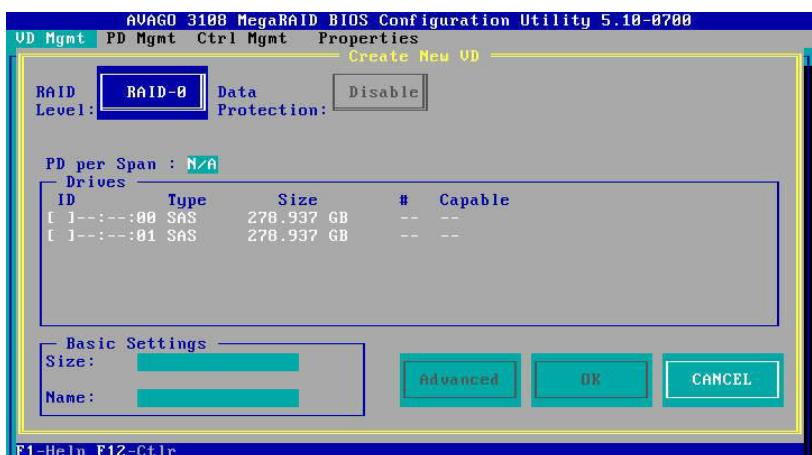

VD Mgmt (Virtual Management) Menu Screen

Move the cursor to select the controller and press <F2>, as shown below. Press <Enter> to create new virtual drives when the following screen displays.
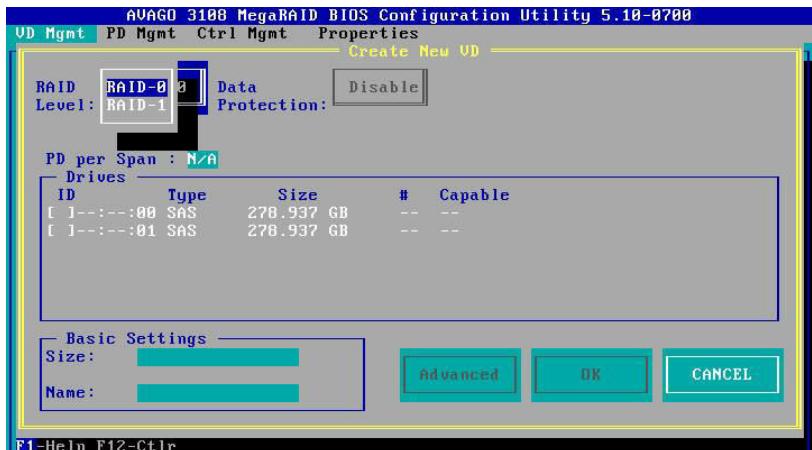

Note You can use the up arrow and down Arrow keys here to select enabled commands, which are highlighted in white, such as "Create Virtual Drive" or "Clear Configuration".

Press <Enter> for the RAID level selection when the screen below shows. This screen also allows you to select parameters of the new virtual drive using the up arrow, down arrow, or <Tab> keys.
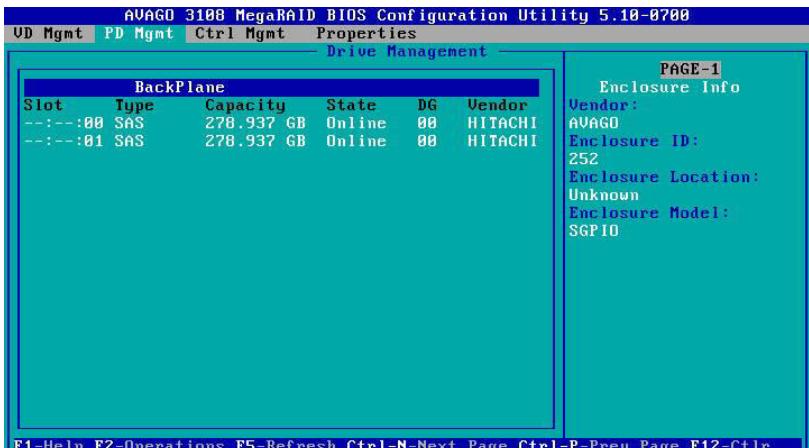
Use the up arrow and down arrow keys to select the RAID level, as shown below, and press <Enter>.

Note The corresponding RAID level(s) will display based on the number of hard drives connected to the selected controller.
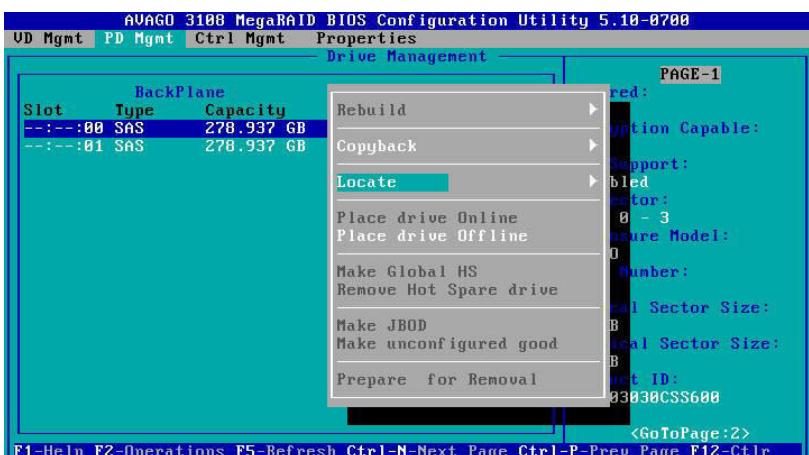
4-5   PD Mgmt (Physical Drive Management)

Press <Ctrl><N> or <Ctrl><P> to select the PD Mgmt menu, as shown below. This screen provides information about hard drives connected to the selected controller. The right panel of the screen shows the information about the selected device.

PD Mgmt (Physical Management) Menu Screen

To select a device, use the up arrow, down arrow or <Tab> keys and press <F2>. Press <Enter> to perform a command, such as rebuilding a failed drive, locating a drive, or making a drive offline, as shown below.
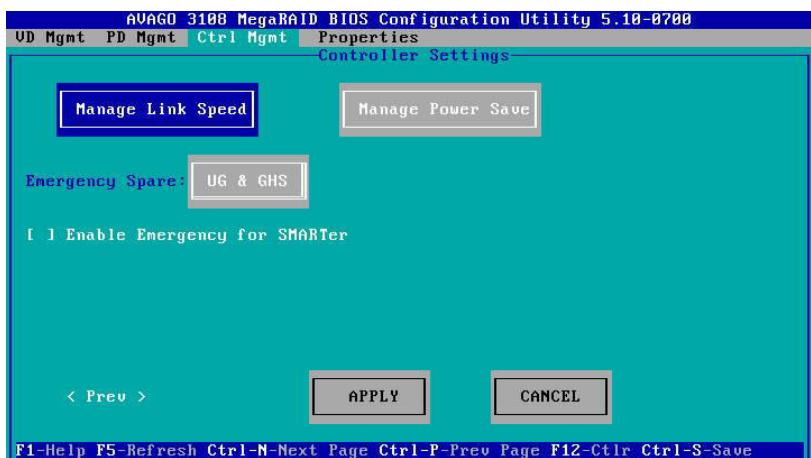
4-6   Ctrl Mgmt (Control Management)

Press <Ctrl><N> or <Ctrl><P> to select the Ctrl Mgmt menu, as shown below. This menu provides information about the settings of the selected controller. On this screen, use the up arrow, down arrow or <Tab> keys to move the cursor. To apply changes, navigate to APPLY and press <Enter>.
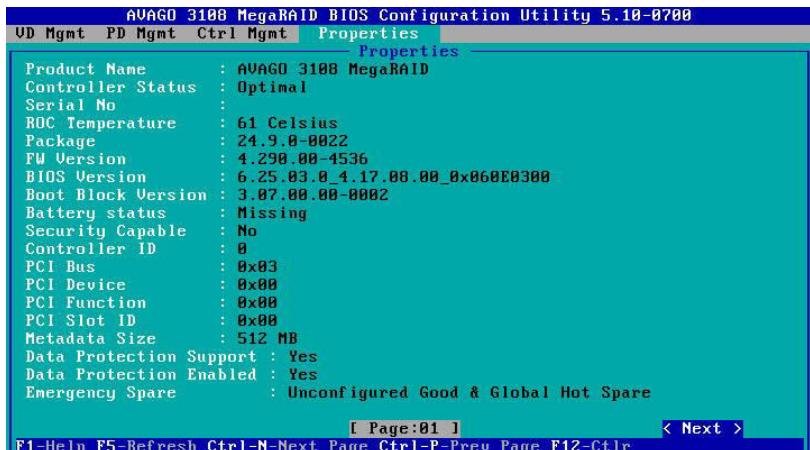
Navigate to Next and press <Enter> to open the second screen, as shown below. The following screen allows you to view and changes settings, such as the link speed or the power save.
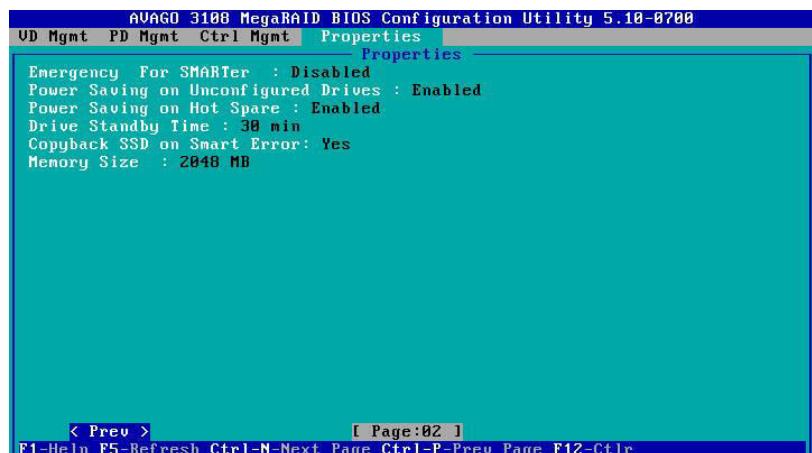
4-7   Properties

Press <Ctrl><N> or <Ctrl><P> to select the Properties menu, as shown below. This menu provides read-only information about the properties of the selected controller.

```
        AVAGO 3108 MegaRAID BIOS Configuration Utility 5.10-0700
 VD Mgmt  PD Mgmt  Ctrl Mgmt   Properties
                             Properties
 Product Name        : AVAGO 3108 MegaRAID
 Controller Status   : Optimal
 Serial No           :
 ROC Temperature     : 61 Celsius
 Package             : 24.9.0-0022
 FW Version          : 4.290.00-4536
 BIOS Version        : 6.25.03.0_4.17.08.00_0x060E0300
 Boot Block Version  : 3.07.00.00-0002
 Battery status      : Missing
 Security Capable    : No
 Controller ID       : 0
 PCI Bus             : 0x03
 PCI Device          : 0x00
 PCI Function        : 0x00
 PCI Slot ID         : 0x00
 Metadata Size       : 512 MB
 Data Protection Support : Yes
 Data Protection Enabled : Yes
 Emergency Spare         : Unconfigured Good & Global Hot Spare

                         [ Page:01 ]                    < Next >
 F1-Help F5-Refresh Ctrl-N-Next Page Ctrl-P-Prev Page F12-Ctlr
```

Navigate to Next and press <Enter> to open the second screen to view more prop-erties, as shown below. To go back to the first screen, navigate to Prev (Previous) and press <Enter>.

```
        AVAGO 3108 MegaRAID BIOS Configuration Utility 5.10-0700
 VD Mgmt  PD Mgmt  Ctrl Mgmt   Properties
                             Properties
 Emergency  For SMARTer   : Disabled
 Power Saving on Unconfigured Drives : Enabled
 Power Saving on Hot Spare : Enabled
 Drive Standby Time : 30 min
 Copyback SSD on Smart Error: Yes
 Memory Size   : 2048 MB







   < Prev >                    [ Page:02 ]
 F1-Help F5-Refresh Ctrl-N-Next Page Ctrl-P-Prev Page F12-Ctlr
```

4-8　Foreign View

Press <Ctrl><N> or <Ctrl><P> to select the Foreign View menu, as shown below. This menu provides information about the foreign configurations, such as drive groups, virtual drives, physical drives, and hot spare drives. Also, this menu allows you to import or clear the foreign configurations. Please note that the Foreign View menu displays only when a foreign configuration has been connected to the controller.

Foreign View Menu Screen

Chapter 5

MegaRAID Controller Firmware Update Procedures

This chapter provides instructions on how to flash MegaRAID controller firmware. Please visit our website at www.supermicro.com for more information about firmware/utilities downloads.

5-1   Flashing Firmware Using MegaCLI under DOS

1. You need the MegaCLI utility and ROM file (smc3108.rom) to flash the Mega-RAID firmware.

2. Boot from the USB key and use the following command syntax as shown below, or run the batch file.

megacli –adpfwflash –f <filename.rom> -a0

```
C:\AVAGO\3108\FW\4290~1.00->megacli -adpfwflash -f smc3108.rom -a0
DOS/32A -- Protected Mode Run-time  Version 7.2
Copyright (C) Supernar Systems, Ltd. 1996-2002
DOS/32A warning (9004): mouse initialization failed


Adapter 0: LSI 3108 MegaRAID
Vendor ID: 0x1000, Device ID: 0x005D

Package version on the controller: 24.6.0-0023
Package version of the image file: 24.9.0-0022
Download Completed.
Flashing image to adapter...
Adapter 0: Flash Completed.
Please reboot the system for the changes to take effect

Exit Code: 0x00

C:\AVAGO\3108\FW\4290~1.00->_
```

3. The screen below shows an example of flashing the MegaRAID firmware using the batch file (smc3108.bat).

```
C:\AVAGO\3108\FW\4290~1.00->smc3108.bat
 ***     LSI SAS3108-MR controller FW Flash   ***
 *                                              *
 *                                              *
 *         Flash SMC LSI SAS3108-MR firmware    *
 *                                              *
 *                                              *
 ************************************************
DOS/32A -- Protected Mode Run-time  Version 7.2
Copyright (C) Supernar Systems, Ltd. 1996-2002
DOS/32A warning (9004): mouse initialization failed


Adapter 0: LSI 3108 MegaRAID
Vendor ID: 0x1000, Device ID: 0x005D

Package version on the controller: 24.6.0-0023
Package version of the image file: 24.9.0-0022
Download Completed.
Flashing image to adapter...
Adapter 0: Flash Completed.
Please reboot the system for the changes to take effect

Exit Code: 0x00

C:\AVAGO\3108\FW\4290~1.00->
```

4. Reboot the system and check the firmware version in the controller banner during boot up as shown below.
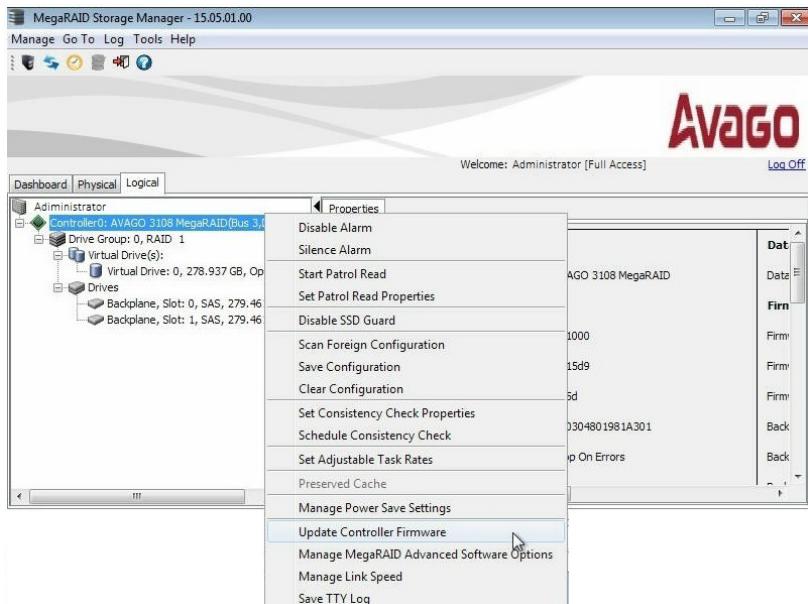
```
AVAGO MegaRAID SAS-MFI BIOS
Version 6.25.03.0 (Build April 10, 2015)
Copyright(c) 2015 AVAGO Technologies
HA -0 (Bus 3 Dev 0) AVAGO 3108 MegaRAID
FW package: 24.9.0-0022

Battery Status: Missing
PCI Slot Number: 0

ID LUN VENDOR    PRODUCT                REVISION        CAPACITY
-- --- ------    -------                --------        --------
       AVAGO     AVAGO 3108 MegaRAID    4.290.00-4536   2048MB
0  0   HITACHI   HUC103030CSS600        A540            286168MB
1  0   HITACHI   HUC103030CSS600        A540            286168MB
   0   AVAGO     Virtual Drive          RAID1           285632MB
```
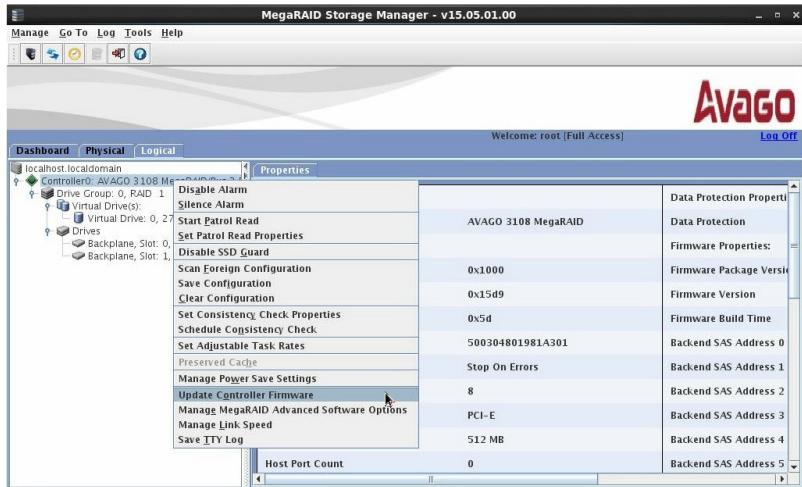
5-2   Flashing Firmware Using MegaRAID Storage Manager

You need the MegaRAID Storage Manager software and ROM file (smc3108.rom) to flash the MegaRAID firmware. Follow the steps below to use the MegaRAID Storage Manager software on the following platforms: Micorsoft Windows operating system and Linux operating system.

1. Open the MegaRAID Storage Manager application.

2. Right-click on the Avago 3108 controller to be updated, and select the Update Controller Firmware menu option as shown below.
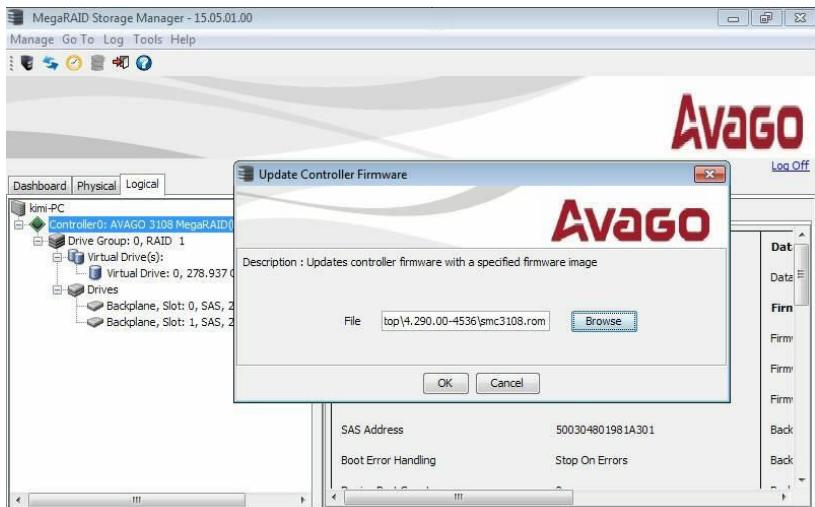
MegaRAID Storage Manager Screen on a Microsoft Windows Operating System
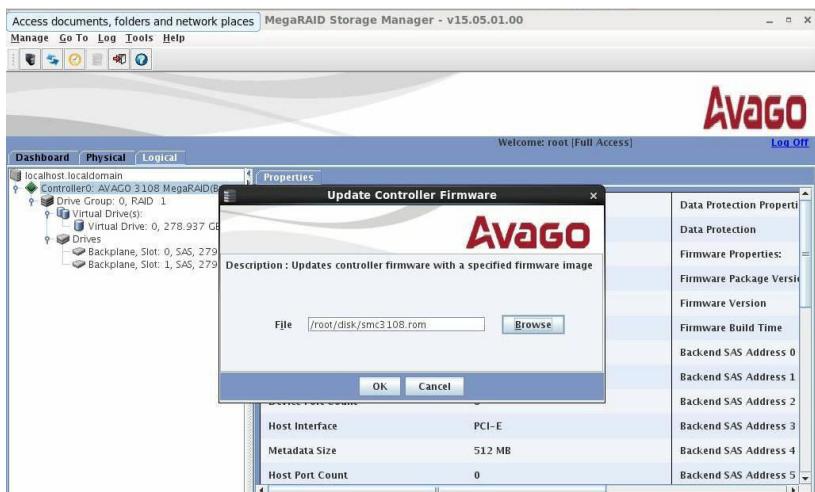
MegaRAID Storage Manager Screen on a Linux Operating System

3. Press the **Browse** button to search for new firmware.

4. Select the new MegaRAID controller firmware as shown below.

5. Click **OK** to continue.
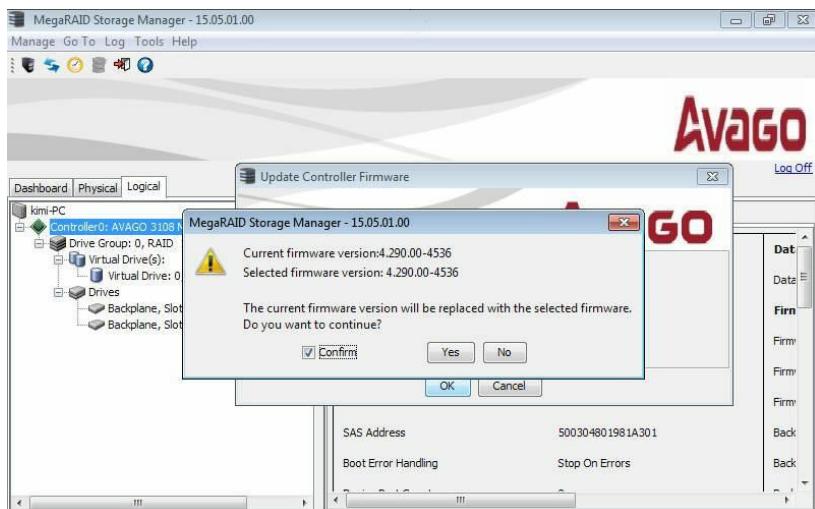
MegaRAID Storage Manager Screen on a Microsoft Windows Operating System
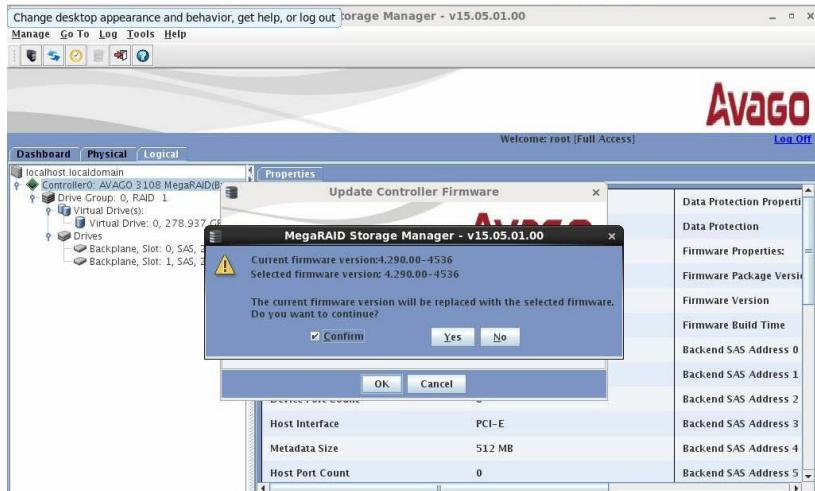
MegaRAID Storage Manager Screen on a Linux Operating System

6. Check **Confirm** in the dialog box and click **Yes** to continue, as shown below.
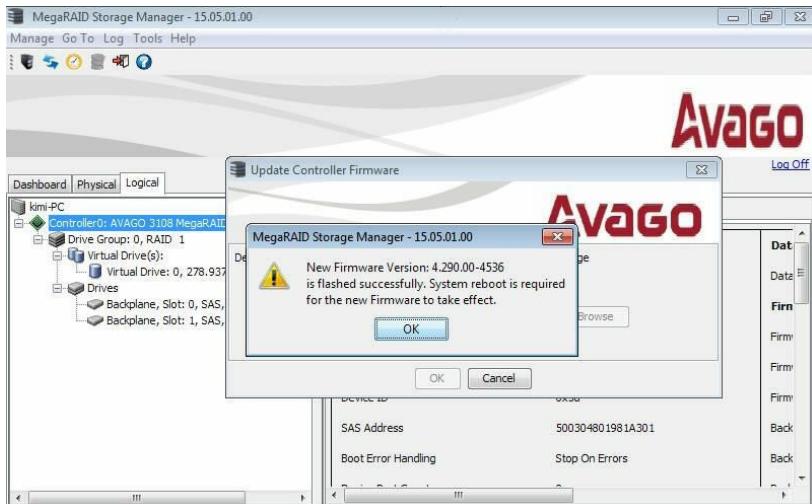
MegaRAID Storage Manager Screen on a Microsoft Windows Operating System
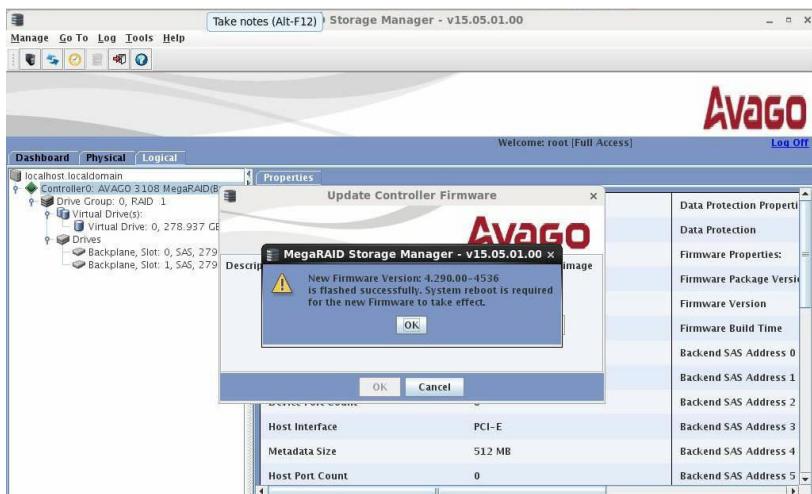
MegaRAID Storage Manager Screen on a Linux Operating System

7. Do not reboot the system until the following screen displays.

8. Click **OK** once the firmware update is completed as shown below.
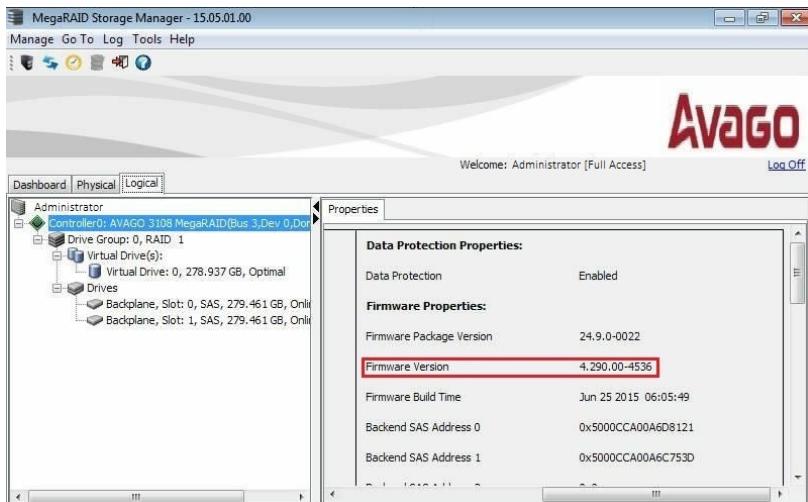
MegaRAID Storage Manager Screen on a Microsoft Windows Operating System
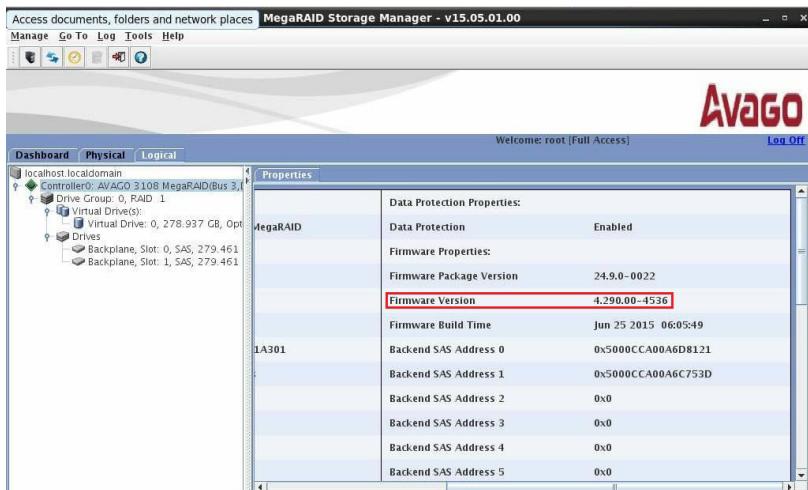
MegaRAID Storage Manager Screen on a Linux Operating System

9. Reboot the system and check the firmware version using the MegaRAID Storage
   Manager application as shown below.

MegaRAID Storage Manager Screen on a Microsoft Windows Operating System

MegaRAID Storage Manager Screen on a Linux Operating System

Chapter 6

MegaRAID CacheCade Configuration

This chapter provides instructions on how to configure MegaRAID CacheCade settings in the Windows environment. Please refer to our website at www.supermicro.com for information on firmware/utilities downloads.

6-1   Enabling MegaRAID CacheCade Support

Minimum System Configuration Requirements
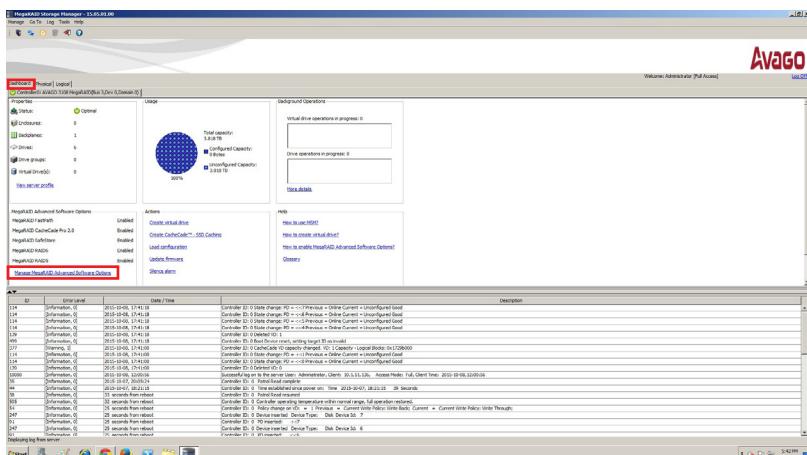
You will need to have the following items pre-installed in your system before configuring MegaRAID CacheCade settings.

1. Minimum of two hard drives

2. AOC-S3108L-H8iR add-on card

3. A PCI-E add-on card

4. Avago S3108 MegaRAID utility

5. A license key for MegaRAID CacheCade (to be purchased from Supermicro)
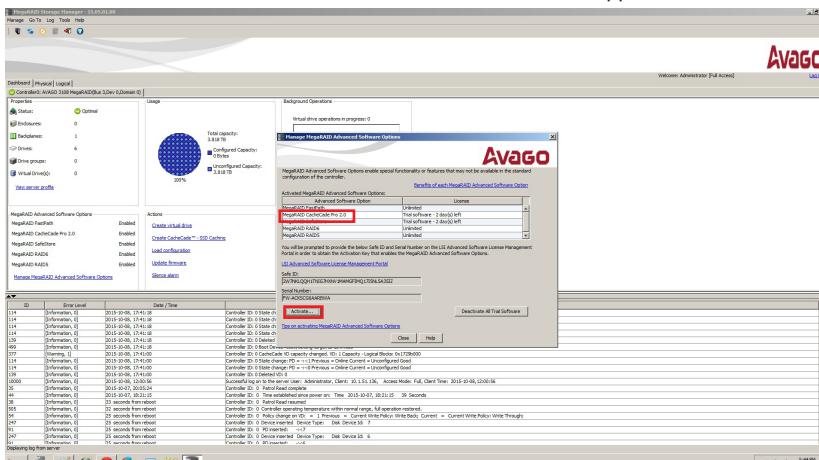
CacheCade Key Activation

The following section provides instructions on how to activate your CacheCade key for proper MegaRAID CacheCade support.
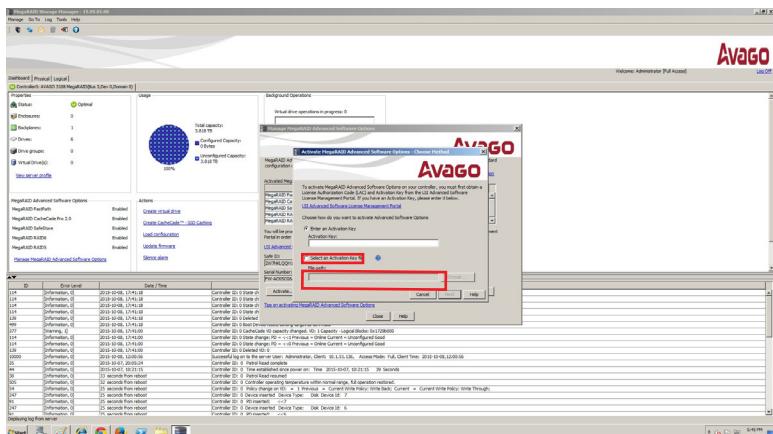
1. From the MegaRAID Storage Manager menu, select **Dashboard** by clicking on it.

2. Double-click on **Manage MegaRAID Adanced Software Options** as shown below.

3. When the following screen displays, click **MegaRAID CacheCAD Pro 2.0** to select it, and click on **Activate** to enable CacheCAD support as shown below.
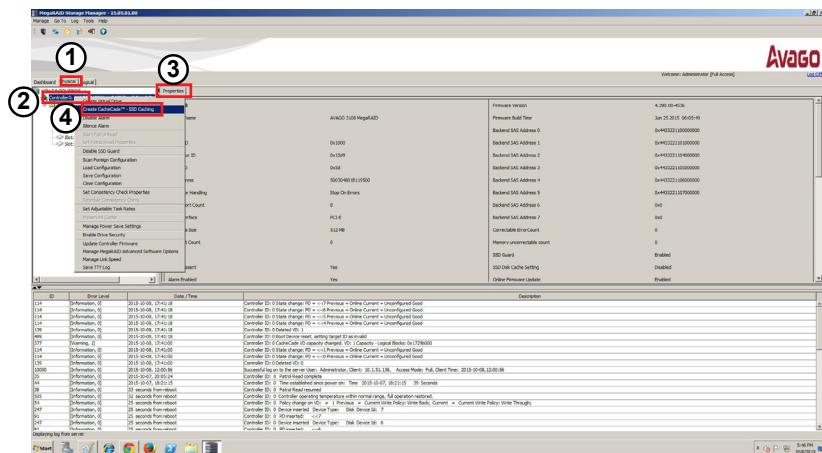
4. When the following screen displays, click on the radio button **"Enter an Activation Key"** and then enter your Activation Key in the field provided as shown below.
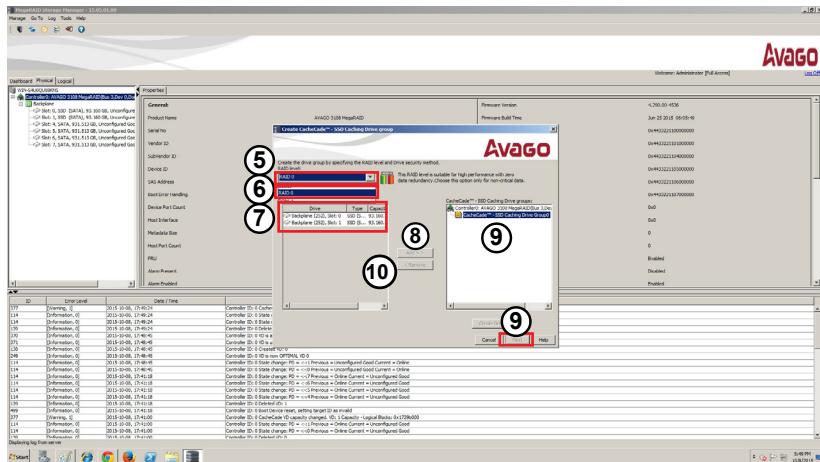
6-2   Configuring the CacheCade RAID Settings and Creating a Drive Group

To configure MegaCacheCade settings, please follow the instructions below.
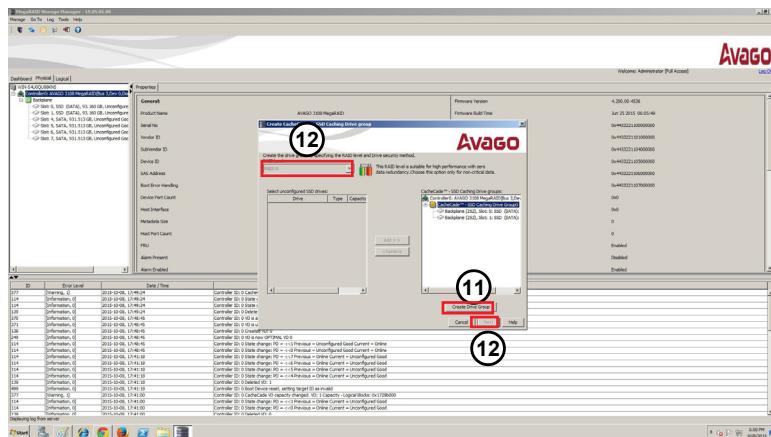
1. From the MegaRAID Storage Manager menu, select **Physical** by clicking on it.

2. From the pull-down menu, select **AVAGO 3108 MegaRAID** by clicking on it.

3. Click on **Properties** to invoke the pull-down submenu.

4. From the Properties pull-down submenu, select **Create CacheCade™ - SSD Caching** by clicking on it.

5. When the following screen displays, click on **Select** to select the RAID setting to configure for your HDDs.

6. Select your desired **RAID setting** to the hard drive you want to configure.

7. Click on **Drive** to invoke the pull-down submenu. From the pull-down sub-menu, select the hard drives you want to configure the RAID setting.

8. With the desired hard drive selected, click on the **Add** button to add the selected hard drive to your drive group list.

9. With all hard drives selected, click **Next** to create a CacheCade drive group.

10. To remove a hard drive from the selected drive group, select the drive you want to remove and click on **Remove** to remove it from the list as shown below.

11. After adding all HDDs you want to use to create a drive group to the list, click on **Create Drive Group** to create a CacheCade drive group as shown below.
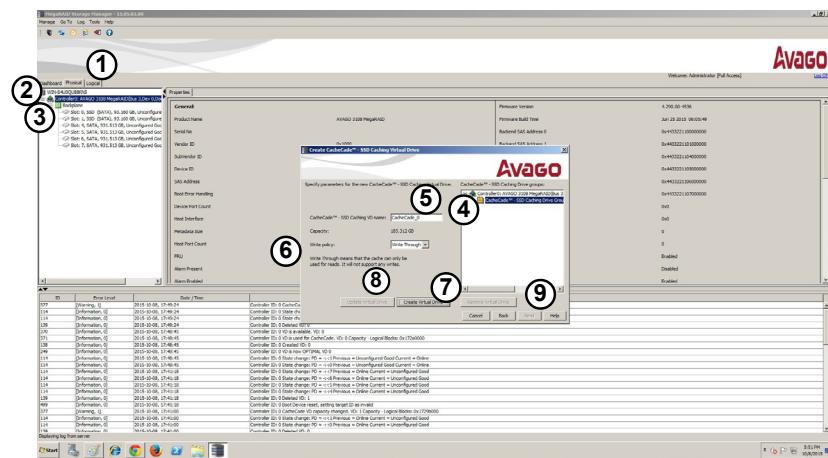
12. From the pull-down submenu, select the RAID setting you want to configure and click **Next** to assign the selected RAID setting to all HDDs included in the drive group list.

6-3   Creating a CacheCade - SSD Caching Virtual Drive

To create a SSD caching virtual drive, please follow the instructions below.

1. From the MegaRAID Storage Manager menu, select **Physical** by clicking on it.

2. From the pull-down menu, select **AVAGO 3108 MegaRAID** by clicking on it.

3. From the available drive list on the left, select the drive to create a virtual drive by double-clicking on it.

4. Double-click on **Create CacheCade™ - SSD Caching Drive Group**.

5. Enter an SSD Caching VD (Virtual Drive) name in the field.

6. Select the desired Write Policy from the pop-up menu.

7. Click **Create Virtual Drive** to create a virtual drive.

8. Repeat the steps 4-6 and click **Update Virtual Drive** to create multiple virtual drives to form a drive group.

9. Once you have created desired virtual drives, click **Next**.

10. To remove a virtual drive from a virtual drive group, select the drive to remove and click on **Remove Virtual Drive**.

11. To cancel the deletion, click on **Cancel**.

12. To proceed to the next step to configure the virtual drive settings, click **Next**.

13. The following screen will display to indicate the status of the virtual drive that you've just created. Review the status of the virtual drive.
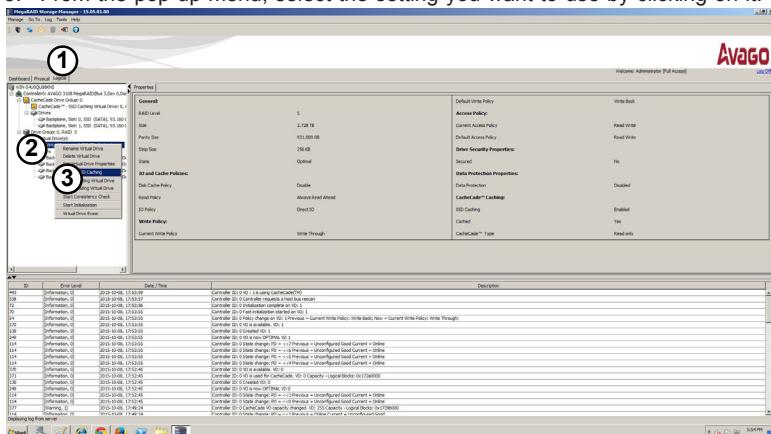

14. After reviewing the status of the virtual drive as shown above, click **Back** to make changes as needed, and click **Finish** to complete virtual drive creation.
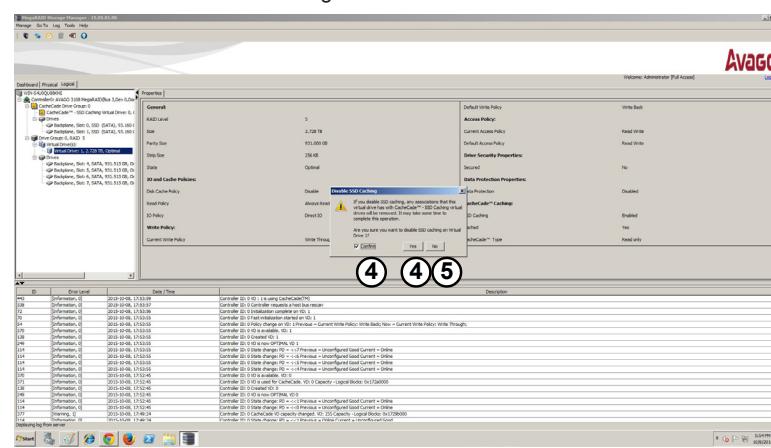
6-4   Configuring Virtual Drive Settings

To configure the settings for a virtual drive, please follow the instructions below.

1. From the MegaRAID Storage Manager menu, select **Logical** by clicking on it.

2. From the Virtual Drive(s) pull-down menu, select the **Virtual Drive** you want to configure by clicking on it.

3. From the pop-up menu, select the setting you want to use by clicking on it.
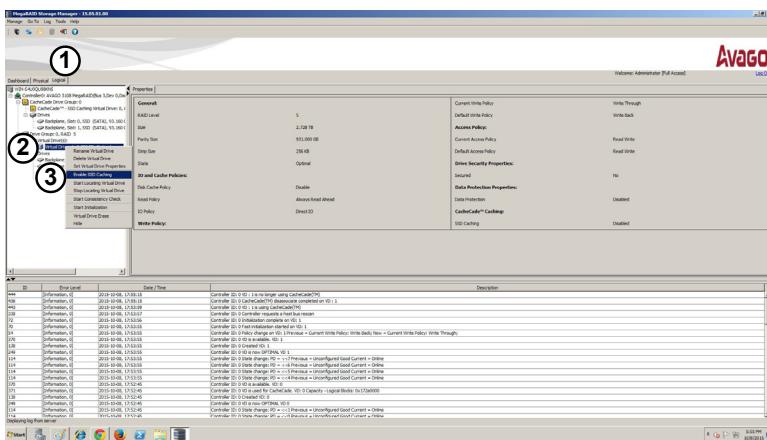
4. A dialogue box will display to warn you that a setting of the selected virtual drive will be changed. Click **Confirm** and **Yes** for the virtual drive to use the new setting(s).

5. Click **No** to use the old setting.

6-5   Enabling SSD Caching Support on a Virtual Drive

To enable SSD Caching support for a virtual drive, please follow the instructions below.

1. From the MegaRAID Storage Manager menu, select **Logical** by clicking on it.

2. From the Virtual Drive(s) pull-down menu, select the **Virtual Drive** for SSD Caching support by clicking on it.

3. From the pop-up menu, click **Enable SSD Caching** to enable SSD Caching support. After SSD Caching support is enabled, you can use advanced CacheCade settings on a selected virtual drive.

(Disclaimer Continued)

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