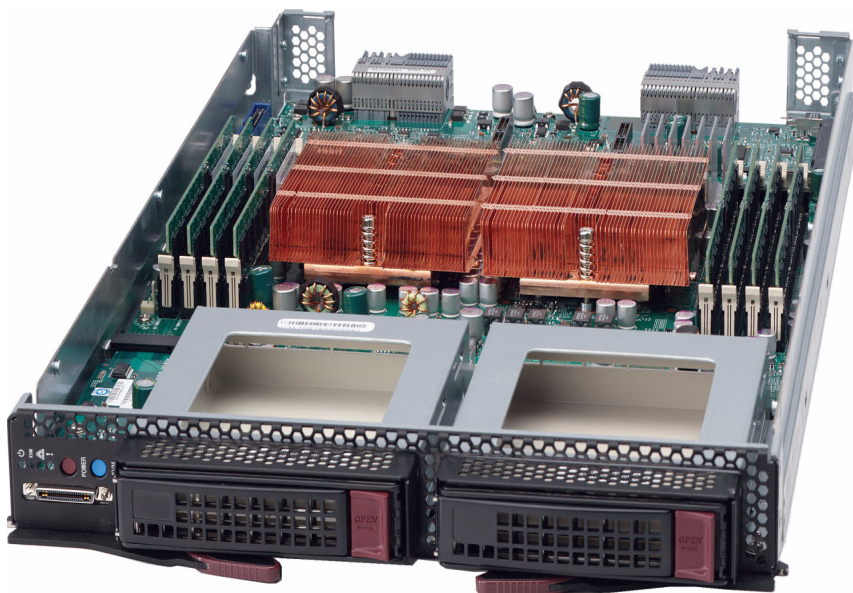


SUPERMICRO[®]

SBA-7121M-T1 Blade Module



RAID Setup Procedure

Revision 1.0

SBA-7121M-T1 Blade Module RAID Setup Procedure

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Manual Revision 1.0

Release Date: March 31, 2008

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Printed in the United States of America

SBA-7121M-T1

RAID Setup Procedure

1. Installing the Operating System

An operating system (OS) must be installed on each blade module. Unlike most blade systems, blades with Microsoft Windows OS and blades with Linux OS can both occupy and operate within the same blade enclosure. Refer to the Supermicro web site for a complete list of supported operating systems.

There are several methods of installing an OS to the blade modules.

Installing with an External USB CD-ROM Drive

The most common method of installing the OS is with an external USB CD-ROM drive. Take the following steps to install the OS to a blade module:



WARNING: Installing the OS from an external CD-ROM drive may take several hours to complete.

1. Connect an SUV cable (Serial port/USB port/Video port cable) to the KVM connector on the front of the blade module. You will then need to attach a USB hub to the USB port on this cable to provide multiple USB ports.
2. Connect the external CD-ROM drive, a USB keyboard and a mouse to the USB hub. You will also need to connect a monitor to the video connector on the SUV cable. Turn on the blade module.
3. Insert the CD containing the OS into the CD-ROM drive.
4. Follow the prompts to begin the installation.

Installing via PXE Boot

PXE (Preboot Execution Environment) is used to boot a computer over a network. To install the OS via PXE, the following conditions must be met:

1. The PXE BOOT option in BIOS must be enabled.
2. A PXE server has been configured (this can be another blade in the system).
3. The PXE server must be connected over a network to the blade to be booted.
4. The blade has only non-partitioned/unformatted hard drives installed and no bootable devices attached to it.

Once these conditions are met, make sure the PXE server is running then turn on the blade you wish to boot and/or install the OS to. The BIOS in the blade will look at all

bootable devices and finding none will connect to the PXE server to begin the boot/install.

Installing via Virtual Media (Drive Redirection)

You can install the OS via Virtual Media through either the IPMI or the Web-based Management utility. With this method, the OS is installed from an ISO image that resides on another system/blade. Refer to the appropriate Appendix in the *SuperBlade User's Guide* for the Virtual Media (CD-ROM or Drive Redirection) sections in either of the two utility programs.

2. Management Software

System management may be performed with either of two software packages: IPMI or a Web-based Management utility. Both are designed to provide an administrator with a comprehensive set of functions and monitored data to keep tabs on the system and perform management activities.

Refer to *Chapter 8, SuperBlade User's Guide* for details on the various functions provided by these management programs.

7-1 Installing the Operating System with RAID

Any blade module that supports two or more hard drives may be used to create a RAID RAID array. For AMD processor SuperBlade modules, only the SBA-7121M-T1 blade module with two hard drives installed works for this purpose.

Preparing for Setup

Before you begin the installation, verify the following:

1. The blade module has two or more hard drives installed.
2. These drives must not have an OS installed and must be non-partitioned (formatted is ok).
3. The installation procedure is done via KVM, so have a KVM cable (CBL-0218L) connected to the KVM connector on the blade module with a keyboard, mouse and monitor attached.



NOTE: You may also instead use IPMI or the Web-based Management utility to access the blade.

Changing BIOS Settings for RAID Configuration

1. Boot the blade and hit the <DELETE> key to enter the BIOS setup utility.
2. In the ADVANCED SETTINGS Menu, highlight the SATA CONFIGURATION option and hit <ENTER>.

3. From the SATA Configuration menu screen select the NVIDIA RAID FUNCTION setting, hit <ENTER> to open its options and select ENABLE.
4. Go to the EXIT Menu, highlight SAVE CHANGES AND EXIT and hit <ENTER>.

Configuring RAID in the Media Shield BIOS Utility

1. After exiting the BIOS utility, the blade will begin to boot up. At this time press <F10>. This brings up the MEDIA SHIELD BIOS UTILITY screen.
2. In the MEDIA SHIELD BIOS UTILITY screen, select either MIRRORED or STRIPED as your selection for the RAID MODE option.
3. For the DISKS selection, use the arrow keys to add drives to the ARRAY section. You must select and add at least two drives to the ARRAY section for RAID to work on the module.
4. Press <F7> to finish.
5. In the confirm message screen that appears press <Y> to confirm your selections.
6. Another confirm screen will appear asking you if you want to "Clear MBR". Press <Y> again to confirm this message.
7. Press <CTRL> + <X> to exit the program.

Notes