



AOM-S3108M-H8

User's Guide

Revision 1.0

The information in this User's Guide has been carefully reviewed and is believed to be accurate. The vendor assumes no responsibility for any inaccuracies that may be contained in this document, and makes no commitment to update or to keep current the information in this user's guide, or to notify any person or organization of the updates. **Please Note: For the most up-to-date version of this user's guide, please see our Website at www.supermicro.com.**

Super Micro Computer, Inc. ("Supermicro") reserves the right to make changes to the product described in this user's guide at any time and without notice. This product, including software and documentation, is the property of Supermicro and/or its licensors, and is supplied only under a license. Any use or reproduction of this product is not allowed, except as expressly permitted by the terms of said license.

IN NO EVENT WILL SUPER MICRO COMPUTER, INC. BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, SPECULATIVE OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OR INABILITY TO USE THIS PRODUCT OR DOCUMENTATION, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN PARTICULAR, SUPER MICRO COMPUTER, INC. SHALL NOT HAVE LIABILITY FOR ANY HARDWARE, SOFTWARE, OR DATA STORED OR USED WITH THE PRODUCT, INCLUDING THE COSTS OF REPAIRING, REPLACING, INTEGRATING, INSTALLING OR RECOVERING SUCH HARDWARE, SOFTWARE, OR DATA.

Any disputes arising between the manufacturer and the customer shall be governed by the laws of Santa Clara County in the State of California, USA. The State of California, County of Santa Clara shall be the exclusive venue for the resolution of any such disputes. Supermicro's total liability for all claims will not exceed the price paid for the hardware product.

FCC Statement: This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause harmful interference with radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case you will be required to correct the interference at your own expense.

California Best Management Practices Regulations for Perchlorate Materials: This Perchlorate warning applies only to products containing CR (Manganese Dioxide) Lithium coin cells. "Perchlorate Material-special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate".

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.

User's Guide Revision 1.0

Release Date: April 7, 2015

Unless you request and receive written permission from Super Micro Computer, Inc., you may not copy any part of this document.

Information in this document is subject to change without notice. Other products and companies referred to herein are trademarks or registered trademarks of their respective companies or mark holders.

Copyright © 2015 by Super Micro Computer, Inc.

All rights reserved.

Printed in the United States of America

Preface

About this User's Guide

This user's guide is written for system integrators, IT technicians and knowledgeable end users. It provides information for the installation and use of the AOM-S3108M-H8 add-on module.

About this Add-on Module

The Supermicro AOM-S3108M-H8 is a highly-efficient SAS controller that offers a high level of performance in today's server and storage environments. This module can directly support eight SSD devices and delivers SAS data transfer rates of up to 12Gb/s. Designed for use on the X10DDW-I, X10DDW-iN, X10DDW-iT, X10DRW-i and X10DRW-iT series motherboard, the AOM-S3108M-H8 also supports Supercap, MegaRAID, and can run on Windows and Linux operating systems. Supermicro continues to be an industry leader with the introduction of the AOM-S3108M-H8.

An Important Note to the User

Your module 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 the motherboard to the manufacturer, the RMA number should be prominently displayed on the outside of the shipping carton, and the shipping package is 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, You can also request a RMA authorization online (<http://www.supermicro.com/RmaForm/>).

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

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

Conventions Used in the User's Guide

Pay special attention to the following symbols for proper system installation and for safety instructions to prevent damage to the system or injury to yourself:



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



Note: Additional information given for proper system setup.

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)

Website: 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)

Website: 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

Website: www.supermicro.com.tw

Table of Contents

Preface

About this User's Guide	3
About this Add-on Module	3
An Important Note to the User	3
Returning Merchandise for Service	3
Conventions Used in the User's Guide	4
Contacting Supermicro	5

Chapter 1 Overview

1-1 Overview	1-1
1-2 Technical Specifications	1-1
General	1-1
OS Support	1-2
Physical Dimensions	1-2

Chapter 2 Installation

2-1 Static-Sensitive Devices	2-1
Precautions	2-1
Unpacking	2-1
2-2 Before Installation	2-2
2-3 Installing the Add-on Module	2-2

Chapter 1

Overview

1-1 Overview

Congratulations on purchasing your add-on module 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. For product support and updates, please refer to our website at:

<http://www.supermicro.com/products/accessories/addon/aom-s3108m-h8.cfm>.

1-2 Technical Specifications

General

- LSISAS 3108
- Supported motherboards: X10DDW-I, X10DDW-iN, X10DDW-iT, X10DRW-i, X10DRW-iT
- Supports RAID 0, 1, 5, 6, 10, 50, 60
- Supports 16 Physical Devices with expander backplane
- Supports MegaRAID Storage Manager Software
- Supports 1.5, 3.0, 6.0, and 12.0 SAS data transfer rates and 3.0 and 6.0 Gb/s SATA data transfer rates
- Supports fastpath (Free) and cache code (AOC-CHCD-PRO2-ESW)
- 2GB DDR3 on-card cache at 1866MHz
- Power Usage: 16W
- Compatible with: Supercap BTR-TFM8G-LSICVM02. Installation kit PN: MCP-240-00127-0N. Spacer Kit: MCP-410-00010-0N (2 Spacers and 4 Screws).

OS Support

- Windows® Server 2003 (x64 edition, 64-bit, and 32-bit)
- Windows® Server 2008 R2 (x64 edition and 64-bit)
- Windows® Server 2008 (x64 edition, 64-bit, and 32-bit)
- Windows® Vista (x64 edition and 32-bit)
- Windows® XP
- RedHat Enterprise, SuSe Linux

Physical Dimensions

- Module dimensions: 6" x 2.5" (LxH)

Chapter 2

Installation

2-1 Static-Sensitive Devices

Electrostatic Discharge (ESD) can damage electronic components. To avoid damaging your add-on module, 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 module from the antistatic bag.
- Handle the add-on module by its edges only; do not touch its components, or peripheral chips.
- Put the add-on module 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 module.

Unpacking

The add-on module is shipped in antistatic packaging to avoid static damage. When unpacking your component or your system, make sure that the person handling it is static protected.



Note: To avoid damaging your components and to ensure proper installation, be sure to always connect the power cord last, and always remove it before adding, removing or changing any hardware components.

2-2 Before Installation

To install the add-on module properly, follow the instructions below.

1. Power down the system.
2. Unplug the power cord.
3. Use industry-standard anti-static equipment (such as gloves or wrist strap) and follow the instructions listed on Page 2-1 to avoid damage caused by ESD

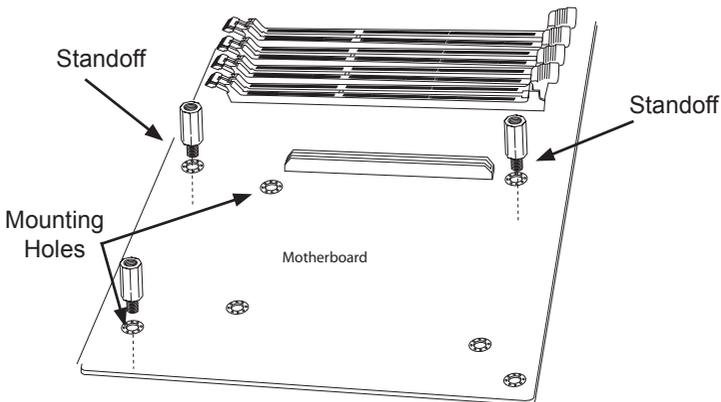
2-3 Installing the Add-on Module

The following items are needed to complete the installation:

- AOM-S3108M-H8 Add-on Module
- Supercap: BTR-TFM8G-LSICVM02
- Installation Kit PN: MCP-240-00127-0N
- Spacer Kit: MCP-410-00010-0N (2 Spacers and 4 Screws)

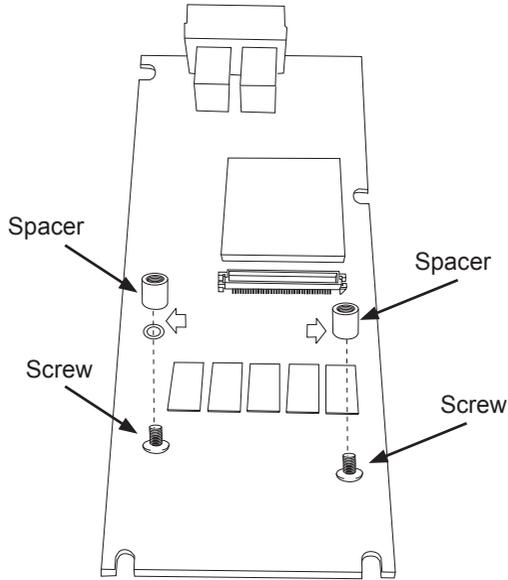
Follow the steps below to install the add-on module in your system.

1. Remove the system cover and set aside any screws for later use.
2. Install standoffs into the mounting holes.

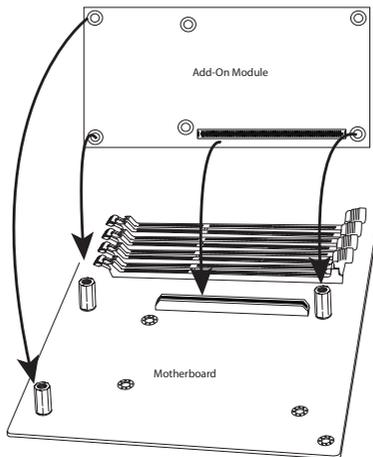


 **Note:** Module graphics in this manual are based on the latest revision. Your module and motherboard may or may not look exactly the same as the graphics shown.

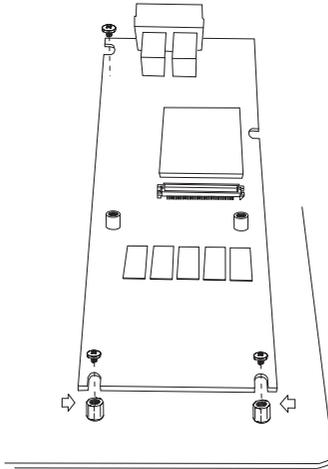
3. Before installing the AOM-S3108-H8 module onto the motherboard, install the spacers onto the middle set of holes on the module. Secure the spacers by tightening the screws on the bottomside of the module.



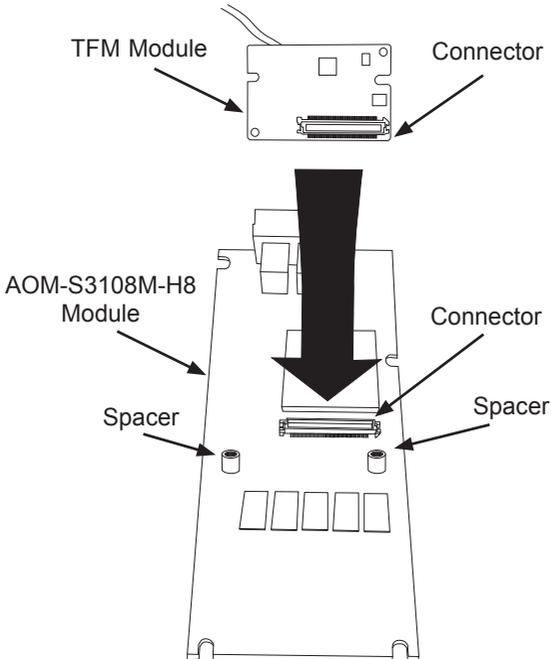
4. Align the connector on the bottom of the add-on module with the PCI-E 3.0 slot on the motherboard.
5. With both hands, press the add-on module down firmly into the slot.



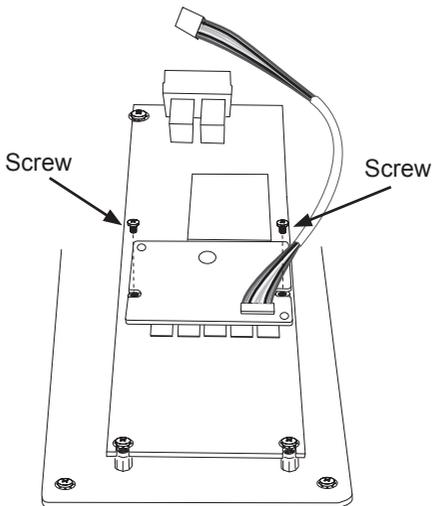
6. With the add-on module securely seated in the slot, insert Pan Head #6 screws into the standoff holes and tighten them with a Phillips screwdriver.



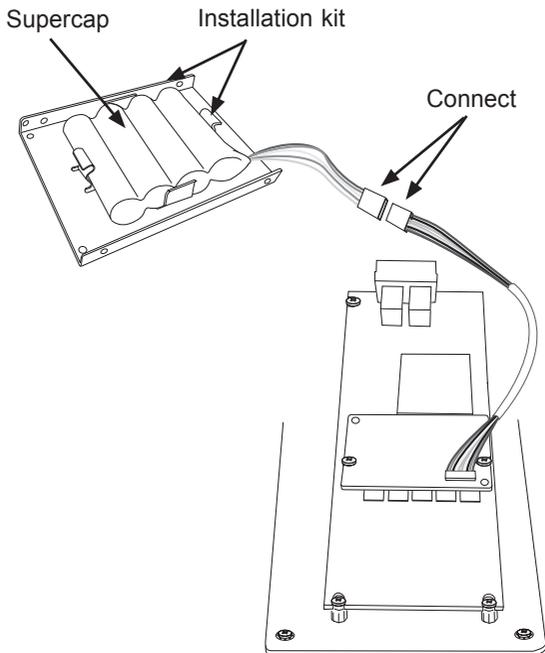
7. Align the connector on the bottom of TFM module with the connector on the AOM-S3108M-H8 module.



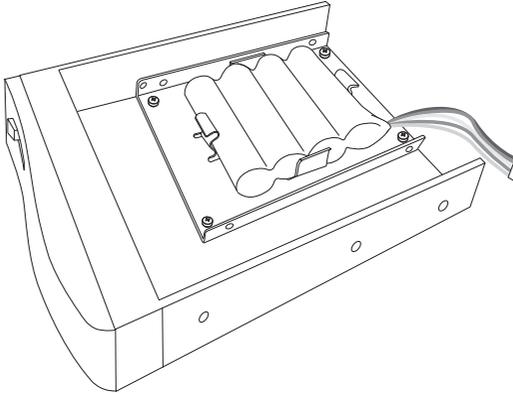
8. Press the TFM module down firmly to seat the module correctly in the slot. Insert two screws provided in the spacer kit and tighten them to secure the TFM module.



9. With the TFM module seated in the AOM-S3108-H8 module, place the Supercap battery in the installation kit. Connect the Supercap wire with the TFM module wire.



10. Mount the installation kit into a 2.5 inch hard disk drive bay. Insert the drive bay back into the system. Reinstall the system cover, reattach the power cord and power on the system.



(Disclaimer Continued)

The products sold by Supermicro are not intended for and will not be used in life support systems, medical equipment, nuclear facilities or systems, aircraft, aircraft devices, aircraft/emergency communication devices or other critical systems whose failure to perform be reasonably expected to result in significant injury or loss of life or catastrophic property damage. Accordingly, Supermicro disclaims any and all liability, and should buyer use or sell such products for use in such ultra-hazardous applications, it does so entirely at its own risk. Furthermore, buyer agrees to fully indemnify, defend and hold Supermicro harmless for and against any and all claims, demands, actions, litigation, and proceedings of any kind arising out of or related to such ultra-hazardous use or sale.