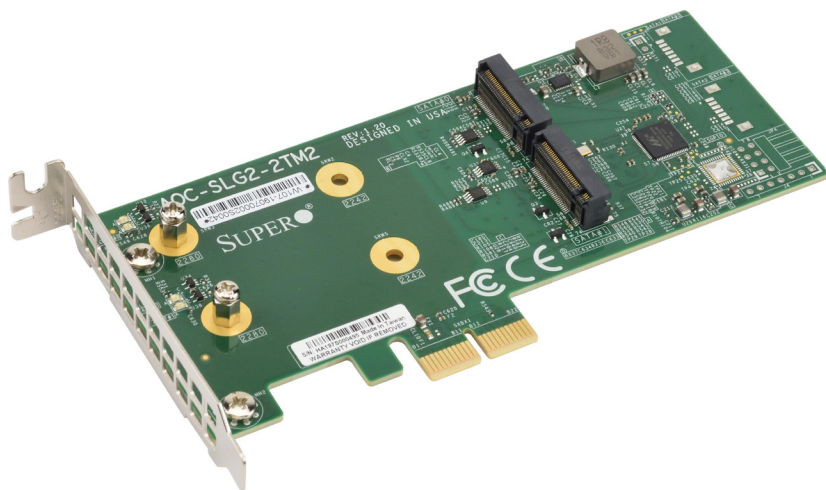




AOC-SLG2-2TM2



User's Guide

Revision 1.0

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Manual Revision 1.0

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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 AOC-SLG2-2TM2 expansion card.

About this Expansion Card

The AOC-SLG2-2TM2 is a RAID1 card that connects up to two SATA M.2 solid state drives (SSDs). It supports SATA in two form factors: 22x42mm or 22x80mm. It can be pre-installed on a server, or can be ordered and added separately.

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. The 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 the AOC-SLG2-2TM2 card 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/>.

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.

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.

Note: Additional information given for proper system setup.

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Chapter 1

Overview

1-1 Overview

Congratulations on purchasing your expansion 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. For product support and updates, please refer to our website at <http://www.supermicro.com>.

1-2 Technical Specifications

General

PCIe 2.0 x2 low-profile SATA M.2 boot device card

Supports 2x SATA3 M.2 SSDs in the following lengths: 80mm, 42mm

Marvell 88SE9230 RAID1 I/O controller

BMC-enabled management through API

Supports onboard activity and status LEDs for each M.2 SSD

OS Support

The following operating systems are supported:

Windows

Linux

VMware

Contact Supermicro tech support at www.supermicro.com for assistance with any hardware limitations associated with your motherboard. (Note: For proper system configuration and setup, please refer to the product page at www.supermicro.com for any limitations associated with your motherboard.)

Physical Dimensions

Card PCB dimensions: 2.71" x 5.24" (H x L)

Chapter 2

Hardware Components

2-1 Expansion Card Layout and Components

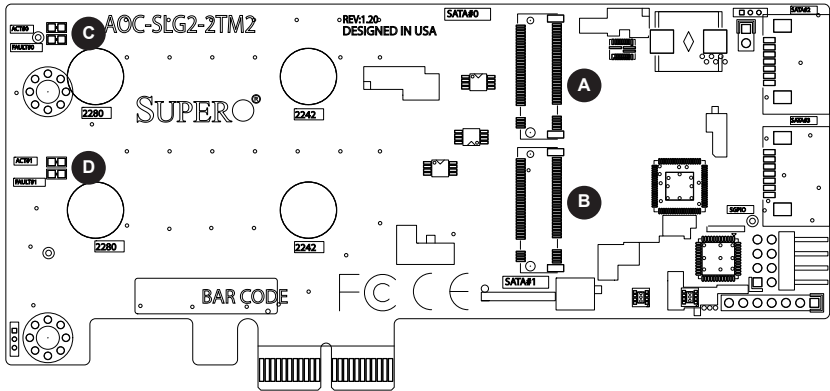


Figure 2-1. The AOC-SLG2-2TM2 Layout

2-2 Major Components

The following major components are on the AOC-SLG2-2TM2:

- A. M.2 Socket 0
- B. M.2 Socket 1
- C. M.2 Socket 0 Activity & Status LEDs
- D. M.2 Socket 1 Activity & Status LEDs

2-3 Connectors and LEDs

M.2 Sockets

There are two M.2 sockets on the expansion card, designated J2 and J3. The card can support one SATA SSD on J2 or J3 or two identical SATA SSDs on J2 and J3.

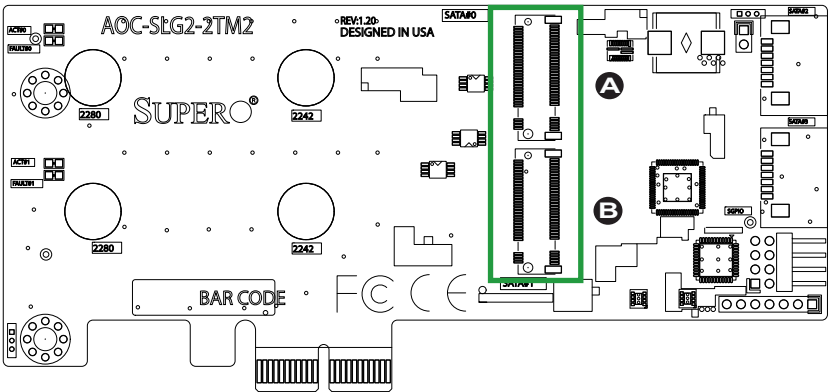


Figure 2-2. The AOC-SLG2-2TM2 SATA Connectors

- A. M.2 Socket 0, designated J2
- B. M.2 Socket 1, designated J3

Activity and Status LEDs

There are two Activity LEDs, designated LED1 and LED2, and two Status LEDs, designated LED5 and LED6, on the AOC-SLG2-2TM2. See the table below for information.

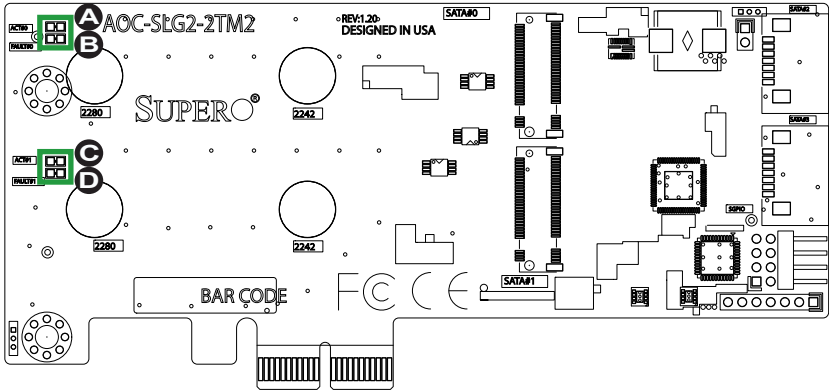


Figure 2-3. The AOC-SLG2-2TM2 LEDs

- A. Activity LED 0, designated LED1
- B. Status LED 0, designated LED5
- C. Activity LED 1, designated LED2
- D. Status LED 1, designated LED6

Activity & Status LED States		
LED	Color	Status
LED1	Green	Blinks whenever there is read or write activity on M.2 Socket 0
LED2	Green	Blinks whenever there is read or write activity on M.2 Socket 1
LED5	Red	Solid indicates failed drive, 1Hz blinking indicates rebuilding on M.2 Socket 0
LED6	Red	Solid indicates failed drive, 1Hz blinking indicates rebuilding on M.2 Socket 1

2-4 Standoffs

The AOC-SLG2-2TM2 is designed with movable standoffs which support two different M.2 SSD lengths. Place the standoffs as indicated below:

Standoffs for SSDs	
M.2 Length	Standoff Position
22mm x 42mm	2
22mm x 80mm	1

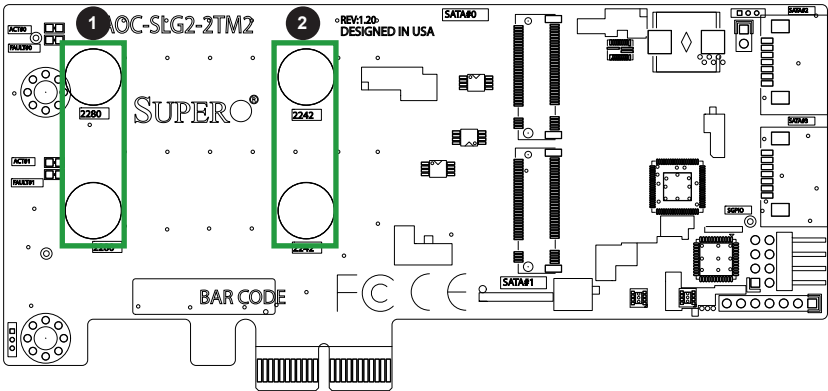


Figure 2-4. The AOC-SLG2-2TM2 Standoff Positions

Chapter 3

Installation

3-1 Static-Sensitive Devices

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

Unpacking

The expansion card is shipped in antistatic packaging to avoid static damage. When unpacking your component, make sure you are 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.

3-2 Installing Expansion Cards

The AOC-SLG2-2TM2 supports two identical SATA M.2 SSDs of 42mm or 80mm length. Visit the Supermicro website for a current list of supported M.2 SSDs.

Installing Expansion Cards

1. Power down the system and remove the power cord from the rear of the power supply.
2. Use industry-standard anti-static equipment (such as gloves or wrist strap) and follow the precautions on page 3-1 to avoid damage caused by ESD.
3. In the rear of the chassis, remove the screw securing the PCIe slot cover over the PCIe slot and set it aside for later use.
4. Insert one M.2 SSD into Slot 0 or two M.2 SSDs into both slots on the expansion card as illustrated below.

Note: The expansion card pictured here may not look exactly like your expansion card.

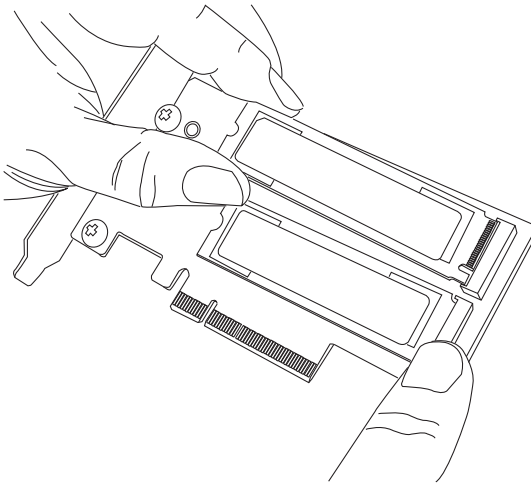


Figure 3-1. Inserting an M.2 SSD into the Expansion Card Slots

- Secure each M.2 card by placing a screw in the mounting hole designated as 42mm or 80mm.

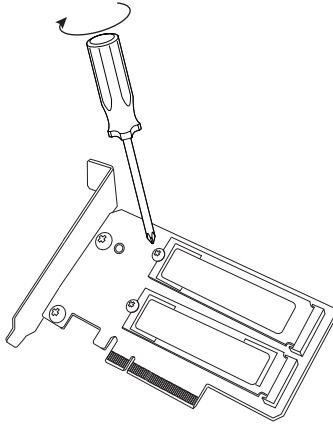


Figure 3-2. Securing the M.2 SSDs to the Expansion Card

- Simultaneously slide the expansion card bracket into the PCIe slot of the chassis while plugging the expansion card into the appropriate slot on the motherboard.

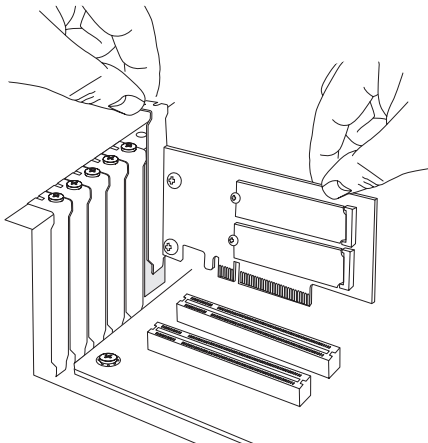


Figure 3-3. Installing the Expansion Card

- Secure the expansion card's bracket into the PCIe slot by replacing the PCIe slot screw that was previously set aside.

8. Plug the power cords into the rear of the power supply and power up the system. This will instantly trigger the Auto-Rebuild functionality if a new SSD is inserted to replace a malfunctional or previously removed Physical Disk in the RAID1 Virtual Disk. Any contents of the new SSD will automatically be overwritten.
9. Set the AOC-SLG2-2TM2 adapter slot to either Legacy mode or EFI mode under the Advanced settings tab in the BIOS.
10. To configure RAID1 Virtual Drive:
 - Legacy mode: Enter Marvell OPTION ROM menu by pressing 'Ctrl-M' prior to OS boot up.
 - EFI mode: Enter the Marvell HII menu within the BIOS.