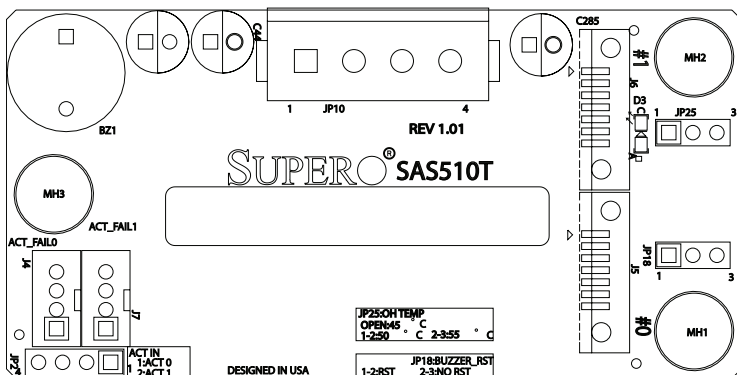


SUPERO[®]



SAS-510T BACKPLANE

USER'S GUIDE

Rev. 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.

Manual Revision 1.0

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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.supermicro.com/support/rma/>).

Whenever possible, repack the backplane in the original Supermicro box, using the original packaging materials. If these are no longer available, be sure to pack the backplane in an anti-static bag and inside the box. Make sure that there is enough packaging material surrounding the backplane so that it does not become damaged during shipping.

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.

Notes

Chapter 1

Safety Guidelines

To avoid personal injury and property damage, carefully follow all the safety steps listed below when accessing your system or handling the components.

1-1 ESD Safety Guidelines

Electrostatic Discharge (ESD) can damage electronic components. To prevent damage to your system, it is important to handle it very carefully. The following measures are generally sufficient to protect your equipment from ESD.

- Use a grounded wrist strap designed to prevent static discharge.
- Touch a grounded metal object before removing a component from the antistatic bag.
- Handle the backplane by its edges only; do not touch its components, peripheral chips, memory modules or gold contacts.
- When handling chips or modules, avoid touching their pins.
- Put the card and peripherals back into their antistatic bags when not in use.

1-2 General Safety Guidelines

- Always disconnect power cables before installing or removing any components from the computer, including the backplane.
- Disconnect the power cable before installing or removing any cables from the backplane.
- Make sure that the backplane is securely and properly installed on the motherboard to prevent damage to the system due to power shortage.

1-3 An Important Note to Users

- 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 manual.

Chapter 2

Jumper Settings and Pin Definitions

2-1 Front Components

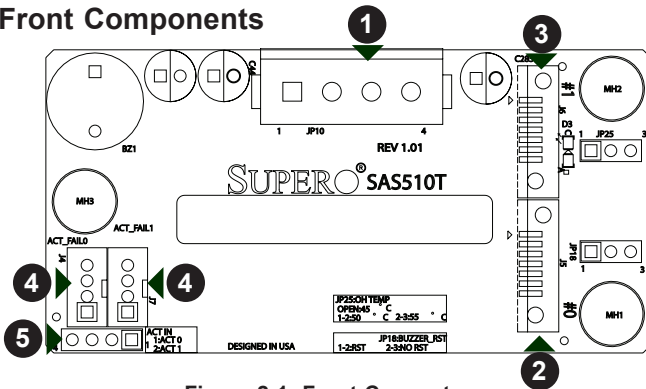


Figure 2-1: Front Connectors

The SAS-510T backplanes features the following front connectors:

Front Connectors

1. Power Connector: (4-pin) JP10
2. SATA Connector: (7-pin), J5, connect to cable.
3. SATA Connector: (7-pin), J6, connect to cable.
4. LED Input Connector: (Not included on most models, only functions with the AOC-SATAR1 Rev 1.01), J4, J7
5. ACT_IN Connector: JP2

2-2 Front Connector and Pin Definitions

1. Power Connector

The 4-pin connector designated JP10 provides power to the backplane. See the table on the right for pin definitions.

Backplane Main Power 4-Pin Connector (JP10)	
Pin#	Definition
1	+12V
2 and 3	Ground
4	+5V

2. - 3. SATA Connectors

The SATA connectors are used to connect the SATA drive cables. The two connectors are designated #0 and #1. Each connector is compatible with SATA and SAS drives.

4. LED Input Connector (Not included on most models)

This option only functions with the AOC-SATAR1 RAID controller.

5. ACT_IN Connector

The activity LED header, designated JP2, is used to indicate the activity status of each drive.

ACT_IN JP2	
Pin#	Definition
1	ACT_IN 0
2	ACT_IN 1
3	N/A
4	N/A

2-3 Front Jumper Locations and Pin Definitions

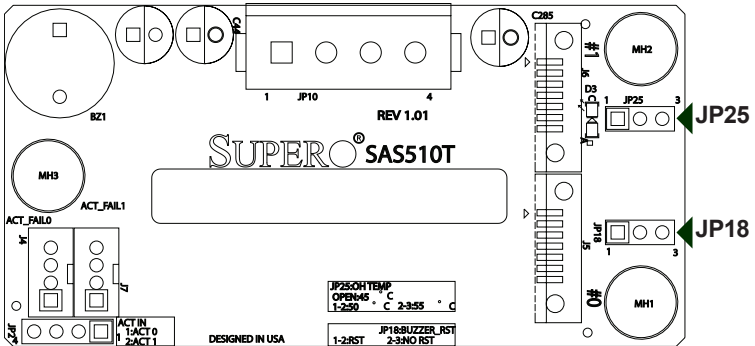
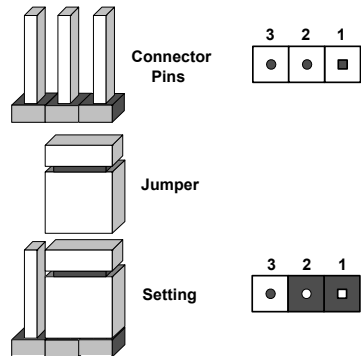


Figure 2-2: Front Jumpers

Explanation of Jumpers

To modify the operation of the backplane, jumpers can be used to choose between optional settings. Jumpers create shorts between two pins to change the function of the connector. Pin 1 is identified with a square solder pad on the printed circuit board. Note: On two pin jumpers, "Closed" means the jumper is on and "Open" means the jumper is off the pins.



Jumper Settings		
Jumper	Jumper Settings	Note
JP18	2-3: No Reset (Default) 1-2: Reset	Buzzer enabled* Buzzer disabled*
JP25	1-2: Default	Overheat temperature settings 1-2 50 degrees C 2-3 55 degrees C Open 45 degrees C

*The buzzer sound indicates that an overheat condition or drive failure has occurred.

2-4 Front LED Indicators

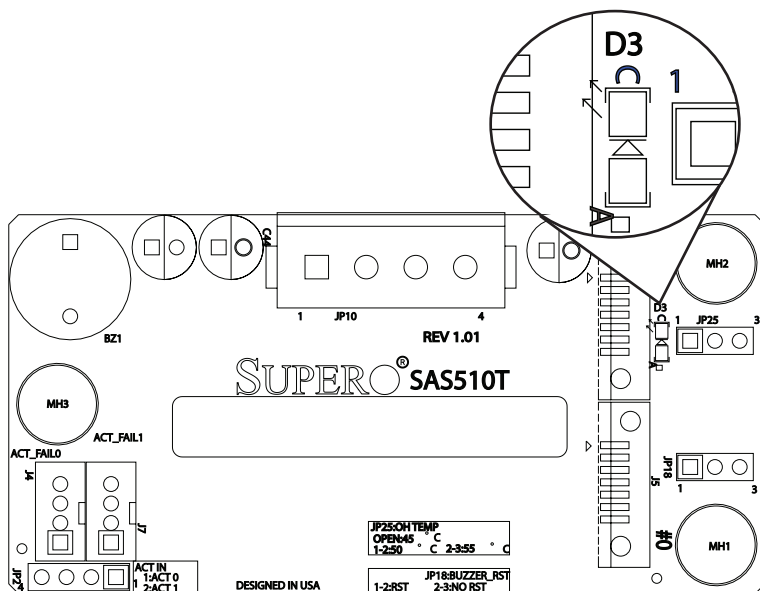


Figure 2-3: Front LEDs

Front Panel LEDs		
LED	State	Specification
D3	ON	Overheat/drive failure LED indicator (Red light: flashing, buzzer: on)

2-5 Rear Connectors and LED Indicators

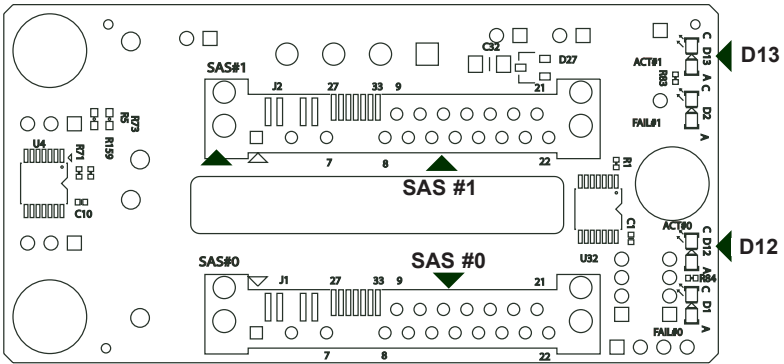


Figure 2-4: Rear Components

Rear SAS/SATA Connectors

Rear Connector	Connector Number	SAS Drive Number
SAS #0	J1	SAS/SATA HDD #0
SAS #1	J2	SAS/SATA HDD #1

Rear LED Indicators

Rear Connector	Hard Drive Activity	Failure LED (Not included on most models)
SAS #0	D12	D1
SAS #1	D13	D2

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