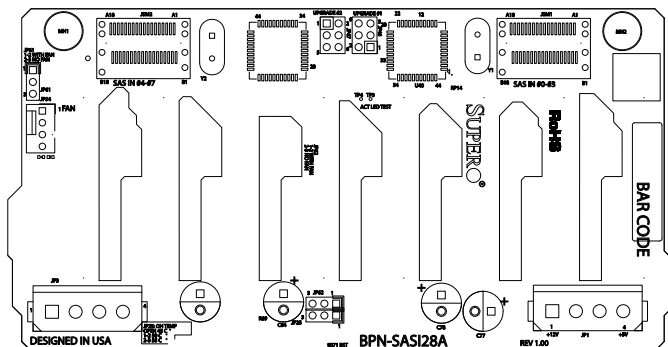


SUPERO®



SAS-I28A 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.

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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 this backplane.
- Disconnect the power cable before installing or removing any cables from this backplane.
- Make sure that the this 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 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.

1-4 Introduction to the SAS-I28A Backplane

The SAS-I28A backplane has been designed to utilize the most up-to-date technology available, providing your system with reliable, high-quality performance.

This manual reflects SAS-I28A Revision 1.00, the most current release available at the time of publication. Always refer to the Supermicro Web site at www.supermicro.com for the latest updates, compatible parts and supported configurations.

Chapter 2

Connectors, Jumpers and LEDs

2-1 Front Connectors and Components

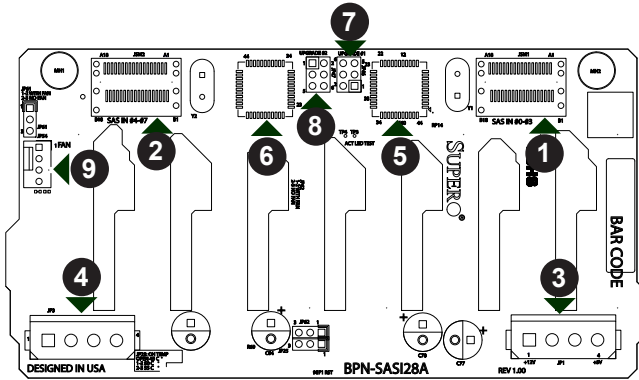


Figure 2-1: Front Connectors and Components

Front Connectors and Components

- | | |
|-------------------------|-------------------------------|
| 1. SAS IN #0 - #3: JSM1 | 6. MG9071 chip |
| 2. SAS IN #4 - #7: JSM2 | 7. Upgrade connector #1: JP46 |
| 3. Power connector: JP1 | 8. Upgrade connector #2: JP47 |
| 4. Power connector: JP3 | 9. Fan connector: JP54 |
| 5. MG9071 chip | |

2-2 Front Components, Connectors and Pin Definitions

#1 - #2 SAS Ports

The SAS ports are used to connect the Mini-SAS cables. The ports are designated SAS IN #0 - #3, and SAS IN #4 - #7. Each port is also compatible with SATA drives.

#3 - #4 Backplane Main Power Connectors

The 4-pin connectors, designated JP1 and JP3, provide power to the backplane. See the table on the right for pin definitions. Both of these connectors must be used at the same time.

Backplane Main Power 4-Pin Connectors	
Pin#	Definition
1	+12V
2 and 3	Ground
4	+5V

#5. - #6. MG9071 Chip

The MG9071 chip is an enclosure management controller chip.

#7 - #8 Upgrade Connector

The upgrade connectors are designated JP46 and JP47. The upgrade connector is for manufacturing use only.

#9 Fan Connectors

The fan connector is designated JP54.

2-3 Front Jumper Locations and Pin Definitions

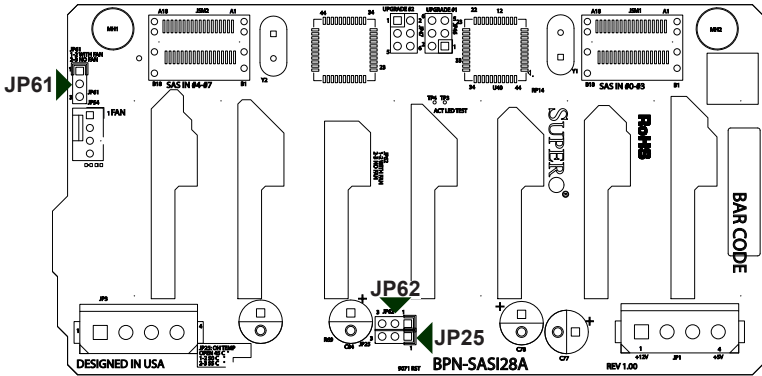
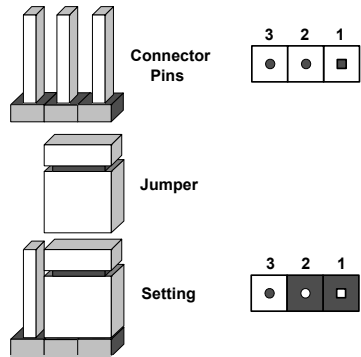


Figure 2-2: Front Jumper

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.



General Jumper Settings		
Jumper	Jumper Settings	Note
JP61	1-2: Fan enabled 2-3: Fan disabled	Enables or disables the fan power.
JP62	1-2: Fan enabled 2-3: Fan disabled	Enclosure monitor enable/disable.
JP25	Open: 45° C 1-2: 50° C 2-3: 55° C	Allows the overheat temperature to be adjusted.

2-4 Rear Connectors and LED Indicators

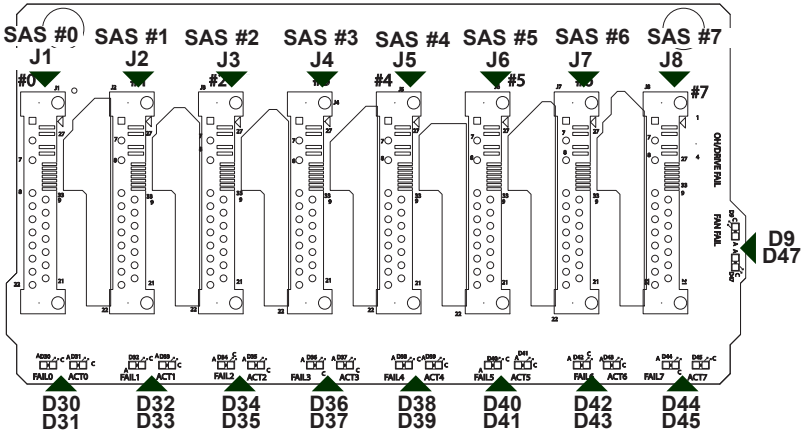


Figure 2-3: Rear Connectors and LED Indicators

Rear LEDs	
LED	Description
D9	OH/DRIVE FAIL
D47	FAN FAIL

Rear SAS/SATA Connectors and LED Indicators			
Rear Connector	Hard Drive Activity	Failure LED	SAS Drive
SAS #0	D31	D30	SAS/SATA HDD #0
SAS #1	D33	D32	SAS/SATA HDD #1
SAS #2	D35	D34	SAS/SATA HDD #2
SAS #3	D37	D36	SAS/SATA HDD #3
SAS #4	D39	D38	SAS/SATA HDD #4
SAS #5	D41	D40	SAS/SATA HDD #5
SAS #6	D43	D42	SAS/SATA HDD #6
SAS #7	D45	D44	SAS/SATA HDD #7

Notes

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