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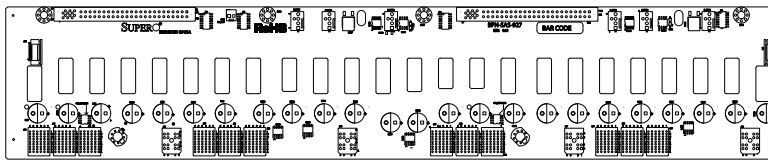

SAS-927 Backplane

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
Release Date: March 2, 2012

Printed in the United States of America

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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

SAS-927 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 backplane 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 SAS-927 backplane.
- Disconnect the power cable before installing or removing any cables from the SAS-927 backplane.
- Make sure that the SAS-927 backplane is securely and properly installed on the motherboard to prevent damage to the system due to a 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 backplane you have received may or may not look exactly the same as the graphics shown in this manual.

1-4 Introduction to the SAS-927 Backplane

The SAS-927 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-927 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 and LEDs

2-1 Front Connectors

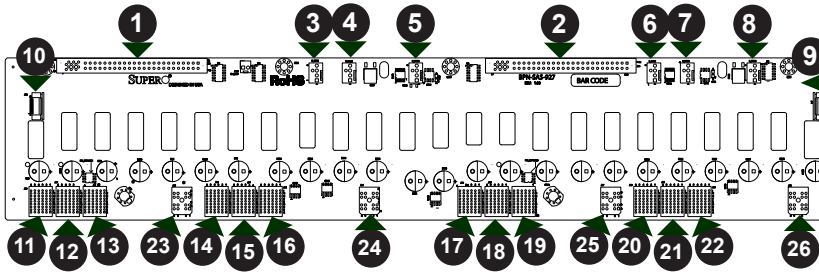

Figure 2-1: Front Connectors

Front Connectors

1. Primary Power Connector: J23
2. Secondary Power Connector: J24
3. Primary Fan1 Connector: P_ FAN1
4. Prim. Fan2 Connector: P_FAN2
5. Prim. Fan3 Connector: P_FAN3
6. Sec. Fan1 Connector: S_FAN1
7. Sec. Fan 2 Connector: S_FAN2
8. Sec. Fan 3 Connector: S_FAN3
9. Front Panel Connector: JP1
10. Front Panel Connector: JP2
11. SBB Connector: J29
12. SBB Connector: J17
13. SBB Connector: J31
14. SBB Connector: J19
15. SBB Connector: J21
16. SBB Connector: J34
17. SBB Connector: J30
18. SBB Connector: J18
19. SBB Connector: J32
20. SBB Connector: J20
21. SBB Connector:J22
22. SBB Connector: J35
23. Prim. SBB Power Connector: J25
24. Prim. SBB Power Connector: J26
25. Sec. SBB Power Connector: J27
26. Sec. SBB Power Connector: J28

1. - 2. Power Connectors

These connectors, designated J23 and J24 supply power to the two motherboard nodes in the chassis.

3. - 8. Chassis Fan Connectors

These connectors, are designated as follows. Primary fans: P-FAN1, P_FAN2 and P_FAN3. Secondary fans: S_FAN1, S_FAN2, and S_FAN3. These fans supply power to the chassis cooling fans.

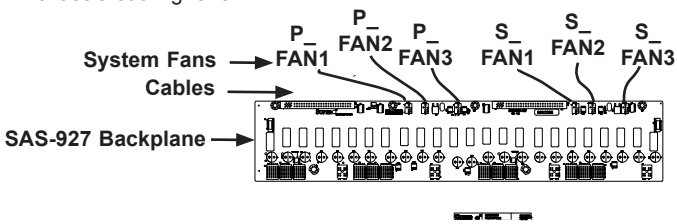

Figure 2-2: Default Configuration - Fans Connected Directly to the Backplane

9. - 10. Front Panel Connectors

These connectors are designated JP1 and JP2. They connect the backplane to the front LED panels on the chassis. JP2 connects to the LED display panel for motherboard B. JP1 connects to the LED display panel for motherboard A.

11. - 26. SBB Connectors

The SBB connectors connect the motherboards to the backplane in the chassis and are designated as follows:

MB_A: J29, J17, JP31, J25, J19, J21, J34, with guide pins J25 and J26.

MB_B: J30, J18, J32, J27, J20, J22, J35, with guide pins J27 and J28

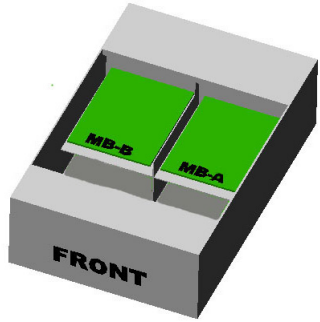

Figure 2-3: Motherboard Locations In the Chassis

2-2 Front LED Indicators

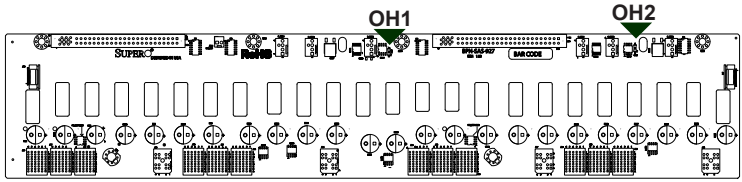

Figure 2-4: Front LEDs

Front Panel LED		
LED	**State**	**Specification**
OH1	Solid on	Indicates an overheat condition on the right side of the SAS-927 backplane, which supports MB-A.
OH2	Solid on	Indicates an overheat condition on the left side of the SAS-927 backplane, which supports MB-B

2-3 Rear Connectors and LED Indicators

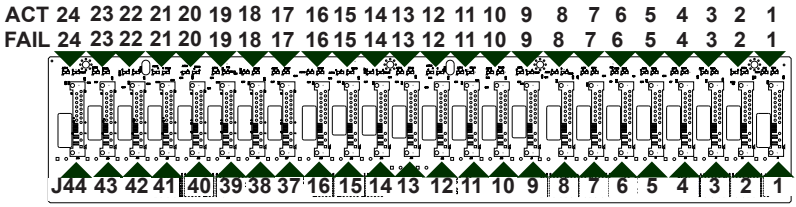

Figure 2-5: Rear Connectors and LEDs

Rear SAS Connectors			
Rear SAS Connector	**SAS Drive Number**	**Rear SAS Connector**	**SAS Drive Number**
J1	HDD 1	J13	HDD 13
J2	HDD 2	J14	HDD 14
J3	HDD 3	J15	HDD 15
J4	HDD 4	J16	HDD 16
J5	HDD 5	J37	HDD 17
J6	HDD 5	J38	HDD 18
J7	HDD 7	J39	HDD 19
J8	HDD 8	J40	HDD 20
J9	HDD 9	J41	HDD 21
J10	HDD 10	J42	HDD 22
J11	HDD 11	J43	HDD 23
J12	HDD 12	J44	HDD 24

Rear LED Indicators					
Connector	**Activity**	**Failure**	**Connector**	**Activity**	**Failure**
J1	ACT1	FAIL1	J13	ACT13	FAIL13
J2	ACT2	FAIL2	J14	ACT14	FAIL14
J3	ACT3	FAIL3	J15	ACT15	FAIL15
J4	ACT4	FAIL4	J16	ACT16	FAIL 16
J5	ACT5	FAIL5	J37	ACT17	FAIL17
J6	ACT6	FAIL6	J38	ACT18	FAIL18
J7	ACT7	FAIL7	J39	ACT19	FAIL19
J8	ACT8	FAIL8	J40	ACT20	FAIL20
J9	ACT9	FAIL9	J41	ACT21	FAIL21
J10	ACT10	FAIL10	J42	ACT22	FAIL22
J11	ACT11	FAIL11	J43	ACT23	FAIL23
J12	ACT12	FAIL12	J44	ACT24	FAIL24

2-4 SAS Ports

The SAS-927 backplane is designed with two separate sections, which support from one to two motherboards independently of each other. The SAS ports are used to connect the SAS drive cables.

SAS Port to Motherboard Configurations	
Number of Motherboards	**SAS Port Connectors**
Using 1 MB	J1 to J44
Using 2 MBs	J1 to J44 (Dual port)

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