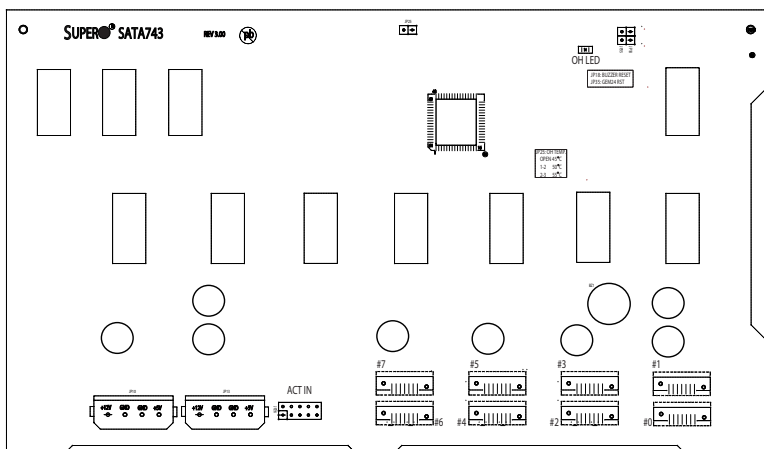


SUPERO[®]



SATA-743 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 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.

1-4 Introduction to the SATA-743 Backplane

The SATA-743 backplane has been designed to utilize the most up-to-date technology available, providing your system with reliable, high-quality performance.

This manual reflects SATA-743 Revision 3.00, 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

Jumper Settings, Connectors and Pin Definitions

2-1 Front Connectors and Jumpers

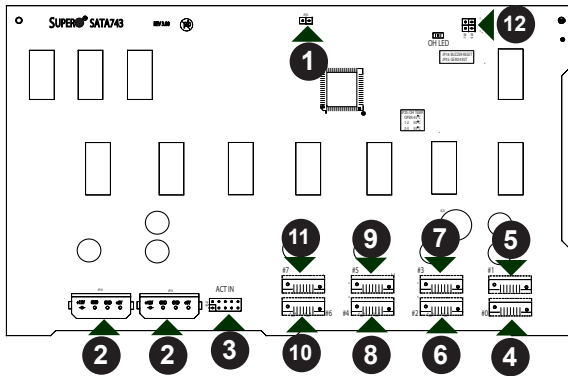


Figure 2-1: Front Connectors

Connectors and Jumpers

- | | |
|---|------------------------|
| 1. Overheat Temperature Setting:
JP25 | 7. SATA Port #3: J8 |
| 2. Power Connectors (4-pin): JP10
and JP13 | 8. SATA Port #4: J10 |
| 3. ACT_IN#0-7: JP26 | 9. SATA Port #5: J12 |
| 4. SATA Port #0: J5 | 10. SATA Port #6: J14 |
| 5. SATA Port #1: J6 | 11. SATA Port #7: J16 |
| 6. SATA Port #2: J7 | 12. Buzzer Reset: JP18 |

2-2 Front Connector and Jumper Pin Definitions

1. Overheat Temperature Jumper

OH TEMP: JP25

Open: 45° C

1-2: 50° C (Default)

2-3: 55° C

2. Backplane Main Power Connectors

The 4-pin connectors designated JP10 and JP13 provide power to the backplane. See the table on the right for pin definitions.

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

3. Activity LED Connector

The activity LED connector, designated JP26, is used to indicate the activity status of each SATA drive. The activity LED connector is located on the front panel. For the activity LED header to work properly, connect using a 10-pin LED cable.

SATA Activity LED Header Pin Definitions			
Pin # Definition		Pin # Definition	
1	ACT IN#0	6	ACT IN#4
2	ACT IN#1	7	ACT IN#5
3	ACT IN#2	8	ACT IN#6
4	ACT IN#3	9	ACT IN#7
5	Ground	10	Empty

4. - 11. SATA Ports

The SATA ports are used to connect the SATA drive cables. The 8 SATA ports are designated #0 - #7.

12. Buzzer Reset

The buzzer reset jumper allows the buzzer to be reset when an alarm has occurred.

2-3 Front Jumper Locations and Pin Definitions

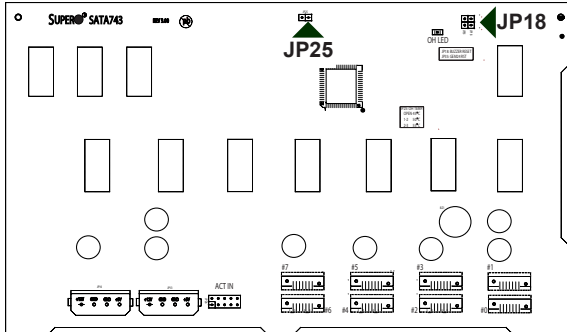
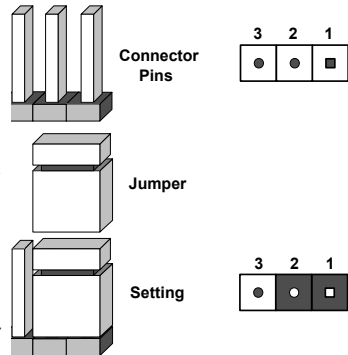


Figure 2-2: Front Jumpers

Socket Settings		
Jumper	Setting	Note
JP18	Open: No Reset (Default) Closed: Reset	Buzzer reset*
JP25	Open: 45° C 1-2: 50° C (Default) 2-3: 55° C	Overheat temperature setting.

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.



*The buzzer sound indicates that a condition requiring immediate attention has occurred.

The buzzer alarm is triggered by the following conditions:

1. Hard drive failure
2. System temperature over 50° Celsius.

Front LED Indicator

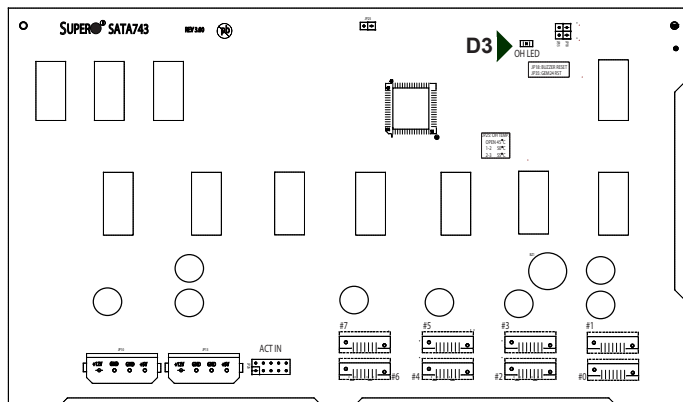


Figure 2-3: Front LED

Front Panel LEDs		
LED	Normal State	Indicator Status
D3: OH LED	Off	Red indicator light is on when an overheat condition occurs.

2-4 Rear Connectors and LED Indicators

Rear Connectors

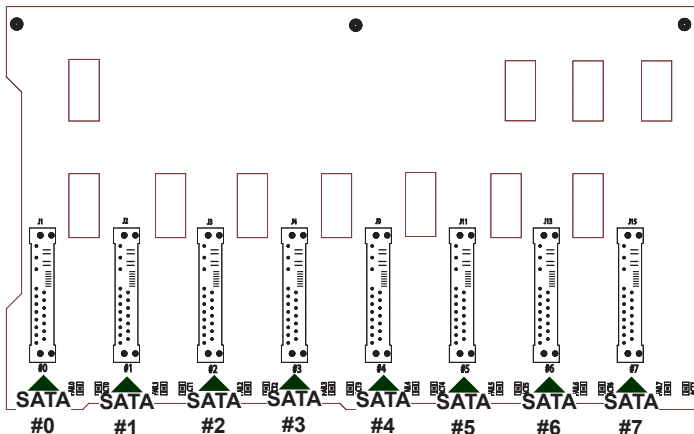


Figure 2-4: Rear Connectors

Rear SATA Connectors	
Rear Connector	SATA Drive Number
SATA #0	SATA HDD #0
SATA #1	SATA HDD #1
SATA #2	SATA HDD #2
SATA #3	SATA HDD #3
SATA #4	SATA HDD #4
SATA #5	SATA HDD #5
SATA #6	SATA HDD #6
SATA #7	SATA HDD #7

Rear LEDs

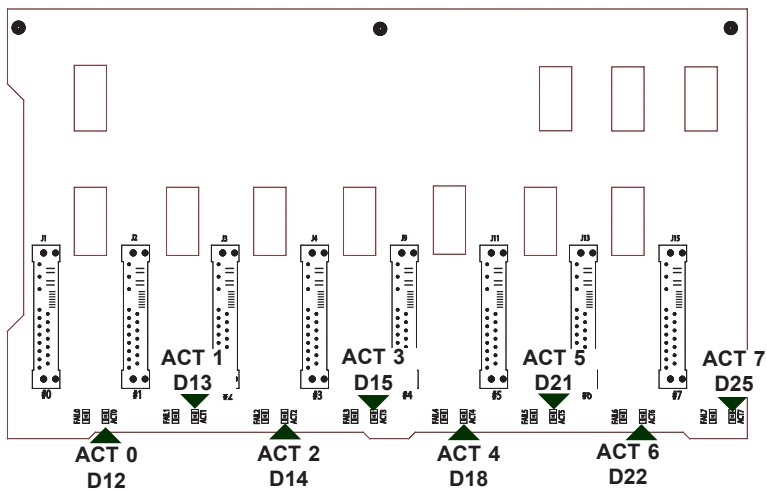


Figure 2-5: Rear LEDs

Rear LED Indicators		
Rear LED	Activity LED	SATA Drive Number
ACT 0	D12	SATA HDD #0
ACT 1	D13	SATA HDD #1
ACT 2	D14	SATA HDD #2
ACT 3	D15	SATA HDD #3
ACT 4	D18	SATA HDD #4
ACT 5	D21	SATA HDD #5
ACT 6	D22	SATA HDD #6
ACT 7	D25	SATA HDD #7

Notes

Disclaimer (cont.)

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