BPN-SAS-801T-A3 BACKPLANE

USER'S GUIDE

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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Contents

Contacting Supermicro.................................................................................................. iv
Returning Merchandise for Service............................................................................. v

Chapter 1 Guidelines
1-1 ESD Safety Guidelines .......................................................................................... 1-1
1-2 General Safety Guidelines ...................................................................................... 1-1
1-3 Version Information ............................................................................................... 1-2

Chapter 2 Connectors, Jumpers and LEDs
2-1 Connector Locations ................................................................................................ 2-1
2-2 Connector Definitions ............................................................................................. 2-2
2-3 Jumper and Pin Definitions ..................................................................................... 2-3
   Explanation of Jumpers ............................................................................................ 2-3
2-4 LED Indicators ........................................................................................................ 2-4
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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.
Chapter 1

Guidelines

This chapter offers guidelines for personal and equipment safety, and notes about the BPN-SAS-801T-A3 version documented in this manual.

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 Version Information

The BPN-SAS-801T-A3 backplane has been designed to utilize the most up-to-date technology available, providing your system with reliable, high-quality performance. This manual reflects BPN-SAS-801T-A3, Revision 1.00, the most current release available at the time of publication. Refer to the Supermicro Web site at www.supermicro.com for the latest updates, compatible parts and supported configurations.
This section describes components of the BPN-SAS-801T-A3 backplane

2-1 Connector Locations

The following connectors are on the top of the backplane when it is mounted in the chassis. They are marked by silkscreen labels.

Figure 2-1. Connectors

1. Main Power: JP10 (4 pin)
2. SATA cable header #0: J5
3. SATA cable header #1: J6
4. SATA cable header #2: J7
5. SAS#0 connector: J1
6. SAS#1 connector: J2
7. SAS#2 connector: J3
8. Thermal diode header: JP20
2-2 Connector Definitions

1. Power Connector
   The 4-pin connector, designated JP10 provides power to the backplane.

<table>
<thead>
<tr>
<th>Pin#</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 and 2</td>
<td>Ground V</td>
</tr>
<tr>
<td>3</td>
<td>+5V</td>
</tr>
<tr>
<td>4</td>
<td>+12V</td>
</tr>
</tbody>
</table>

2-4. SATA Cable Headers
   The 7-pin connectors, designated J5, J6 and J7, connect by cables to the SAS/SATA controller or motherboard SAS/SATA ports.

5-7. SAS Connectors
   J1, J2, and J3 connect directly to the drives.

8. Temperature Sensor Output
   JP20 is the thermistor output from backplane to motherboard or other devices to get ambient temperature around backplane and drive.
2-3 Jumper and Pin Definitions

Figure 2-2. Jumpers

<table>
<thead>
<tr>
<th>Jumper</th>
<th>Settings</th>
<th>Description</th>
</tr>
</thead>
</table>
| JP11   | Pin 1 to GND: Reset SAS #0  
Pin 2 to GND: Reset SAS #1  
Pin 3 to GND: Reset SAS #2 | HDD Power Reset (2x2-pin header) |

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.
2-4 LED Indicators

Figure 2-3. LEDs

<table>
<thead>
<tr>
<th>LED</th>
<th>State</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>Green</td>
<td>+12V power status indicator</td>
</tr>
<tr>
<td>D2</td>
<td>Green</td>
<td>+5V power status indicator</td>
</tr>
<tr>
<td>D3</td>
<td>Red</td>
<td>SAS #0 Power reset in progress</td>
</tr>
<tr>
<td>D4</td>
<td>Red</td>
<td>SAS #1 Power reset in progress</td>
</tr>
<tr>
<td>D5</td>
<td>Red</td>
<td>SAS #2 Power reset in progress</td>
</tr>
</tbody>
</table>

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