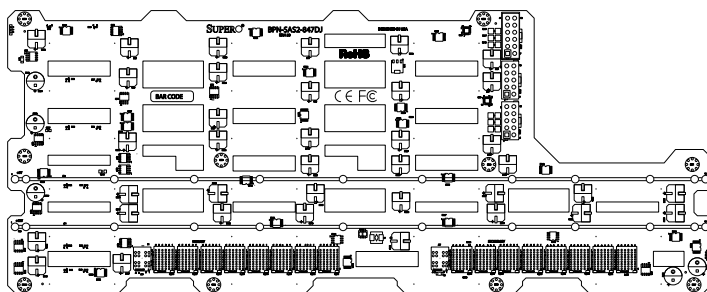


SUPER



BPN-SAS2-847DJ Backplane

Users Guide

Revision 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

Overview

1-1 Chassis Configuration

The SC847DJ chassis configuration consists of the following components:

- One front backplane, BPN-SAS2-847DF
- One rear backplane, BPN-SAS2-847DJ
- One or two rear expander cards, BPN-EXP-847DF3EL1 on each backplane
- Forty-five adapter cards, MCP-280-00024-0N, in double-depth hard drive carriers which support two 3.5" hard drives.

Refer to the chassis manual for removal and installation instructions.

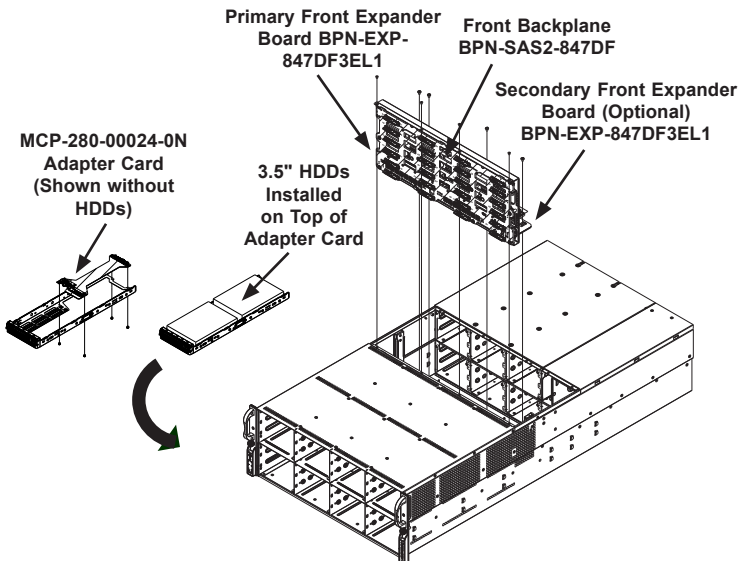


Figure 1-1. BPN-SAS2-847DF Front Backplane Configuration

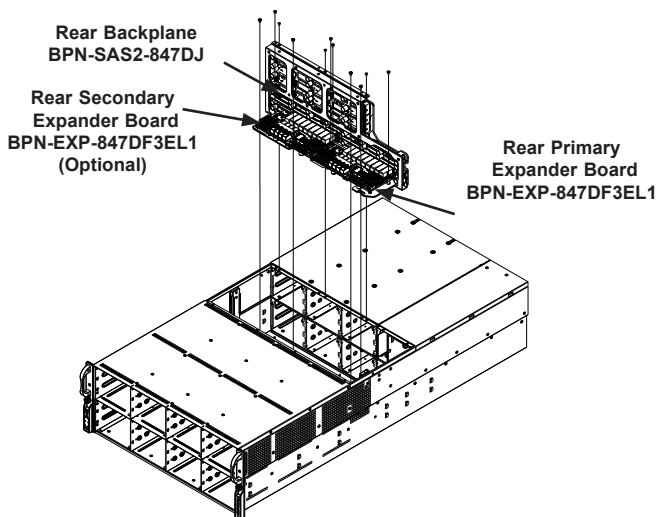


Figure 1-2. BPN-SAS2-847DJ Rear Backplane Configuration

1-2 Version at Time of Publication

The backplanes have been designed to utilize the most up-to-date technology available, providing your system with reliable, high-quality performance.

This manual reflects BPN-SAS2-847DJ Revision 1.0, BPN-SAS2-847DF Revision 1.02, BPN-EXP-847DF3EL1 Revision 1.02 and MCP-280-00024-0N Revision 1.02, the most current releases 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.

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.

Chapter 2

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.

2-1 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.

2-2 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 a power shortage.

Notes

Chapter 3

Connectors and Jumpers

3-1 BPN-SAS2-847DJ Backplane

Front Connectors

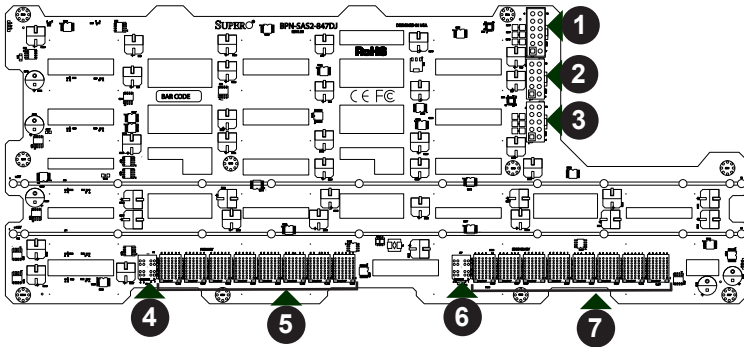


Figure 3-1. BPN-SAS2-847DJ Backplane Front Connectors

Front Connectors

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Main Power Connector: JPW1 2. Main Power Connector: JPW2 3. Main Power Connector: JPW3 4. Primary Expander Power Connector: J26 | <ol style="list-style-type: none"> 5. Primary Airmax Connectors: P_M1 to P_M8 6. Secondary Expander Power Connector: J27 7. Secondary Airmax Connectors: S_M1 to S_M8 |
|---|--|

1. - 3. Power Connectors

These connectors, designated JPW1, JPW2 and JPW3 supply power to the chassis.

4. Primary Expander Power Connector

Supplies power to the primary expander board. This connector is designated J26

5. Primary Airmax Connectors

These connectors are SAS2 signal connectors that connect the backplane and the primary expander board. These connectors are designated P-M1 through P_M8.

6. Secondary Expander Power Connector

Supplies power to the secondary expander board. This connector is designated J27

7. Secondary Airmax Connectors

These connectors are SAS2 signal connectors that connect the backplane and the secondary expander board. These connectors are designated S-M1 through S_M8.

Rear SAS2 Receptacles

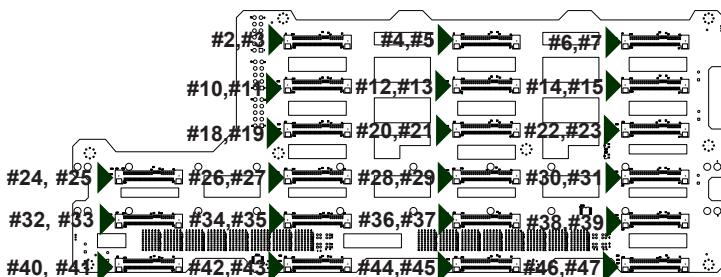


Figure 3-2. BPN-SAS2-847DJ Rear SAS2 Receptacles

Rear SAS2 Receptacles		
Rear Receptacle	SAS Drive Number	Reference
SAS #2, #3	HDD 2, 3	J2
SAS #4, #5	HDD 4, 5	J3
SAS #6, #7	HDD 6, 7	J4
SAS #10, #11	HDD 10, 11	J6
SAS #12, #13	HDD 12, 13	J7
SAS #14, #15	HDD 14, 15	J8
SAS #18, #19	HDD 18, 19	J10
SAS #20, #21	HDD 20, 21	J11
SAS #22, #23	HDD 22, 23	J12
SAS #24, #25	HDD 24, 25	J13
SAS #26, #27	HDD 26, 27	J14
SAS #28, #29	HDD 28, 29	J15
SAS #30, #31	HDD 30, 31	J16
SAS #32, #33	HDD 32, 33	J17
SAS #34, #35	HDD 34, 35	J18
SAS #36, #37	HDD 36, 37	J19
SAS #38, #39	HDD 38, 39	J20
SAS #40, #41	HDD 40, 41	J21
SAS #42, #43	HDD 42, 43	J22
SAS #44, #45	HDD 44, 45	J23
SAS #46, 47	HDD 46, 47	J24

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