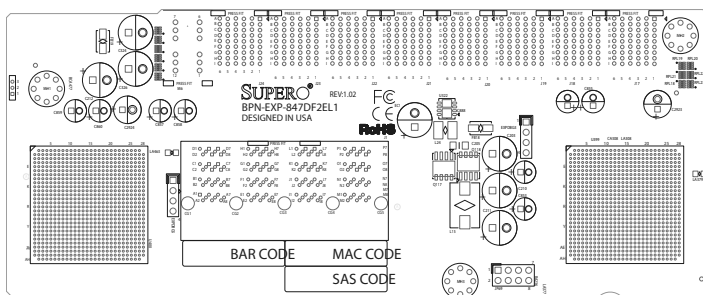


# SUPERO®



## BPN-EXP-847DF2EL1/EL2 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

### BPN-EXP-847DF2EL1/EL2 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 BPN-EXP-847DF2EL1/EL2 backplane.
- Disconnect the power cable before installing or removing any cables from the BPN-EXP-847DF2EL1/EL2 backplane.
- Make sure that the BPN-EXP-847DF2EL1/EL2 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 About the BPN-EXP-847DF2EL1/EL2 Backplane**

The BPN-EXP-847DF2EL1/EL2 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-SAS2-847DF Revision 1.02, BPN-EXP-847DF2EL1/EL2 Revision 1.02 and MCP0280-00024-0N Revision 1.02, the most current releases available at the time of publication. Always refer to the Supermicro web site at [www.supermicro.com](http://www.supermicro.com) for the latest updates, compatible parts and supported configurations.

## Chapter 2

### Connectors, Jumpers and LEDs

#### 2-1 Overview of the SC847D Chassis Configuration

The BPN-SAS2-847DF backplane configuration consists of the following components: One BPN-EXP-847DF backplane, one BPN-EXP-847DFEL1 expansion board, twenty-four MCP-280-00024-0N adapter cards in double-depth hard drive carriers, and one optional BPN-847DFEL2 secondary expansion board. Refer to SC847D chassis manual for removal and installation instructions.

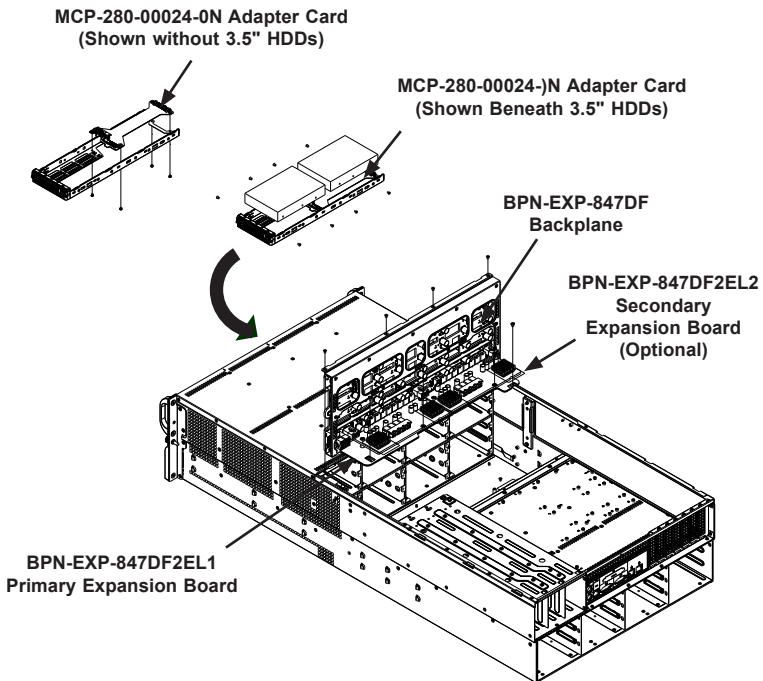


Figure 2-1: BPN-EXP-847DF Backplane Configuration

## 2-2 BPN-EXP-847DF2EL1/EL2 Expander Boards

The BPN-EXP-847DF2EL1 and EL2 expander boards plug into the BPN-EXP-847DF2EL1/EL2 backplane. One or two expander boards may be used.

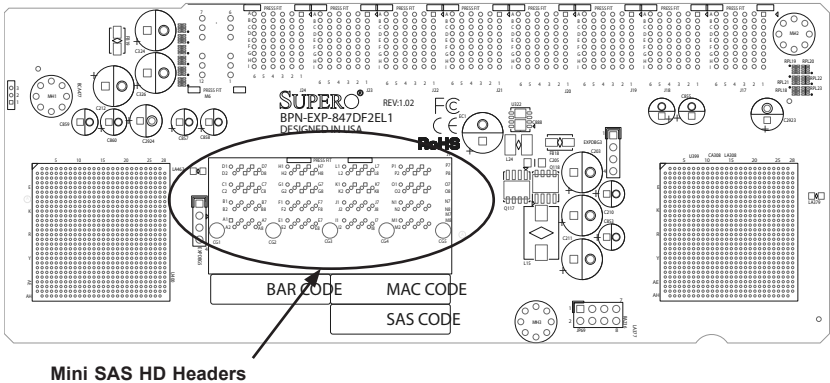


Figure 2-2: BPN-EXP-847DF2EL1/EL2 SAS Mini Headers

BPN-EXP-847DF2EL1/EL2 SAS Mini Headers	
Header	Pins
CGI1	A1-A8, B1-B8, C1-C8, D1-D8
CGI2	E1-E8, F1-F8, G1-G8, H1-H8
CGI3	I1-I8, J1-J8, K1-K8, L1-L8
CGI4	M1-M8, N1-N8, O1-O8, P1-P8

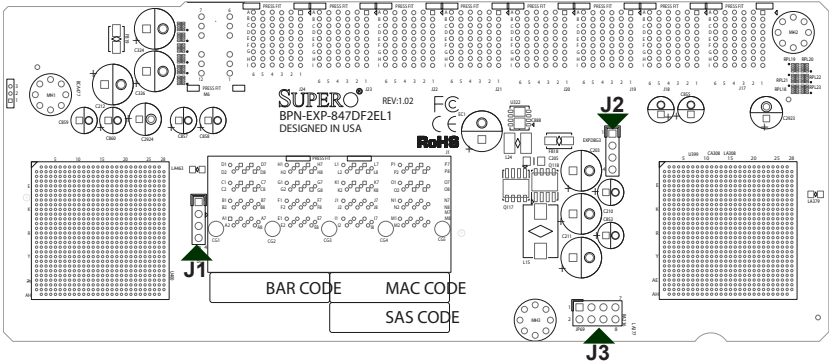


Figure 2-3 BPN-EXP-847DF2EL1/EL2 Jumpers

BPN-EXP-847DF2EL1/EL2 SAS Mini Headers		
Jumper	Name	Function
J1	EXPDBG5	Debug jumper, for manufacturer use only
J2	EXPDBG3	Debug jumper, for manufacturer use only
J3	JP69	Reserved for SMC CB3

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