

SUPER[®]



SAS-816A Backplane

USER'S GUIDE

Rev. 1.0

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Safety Information and Technical Specifications

1. Safety Guidelines



To avoid personal injury and property damage, please carefully follow all the safety steps listed below when accessing your system or handling the components:

ESD Safety Guidelines

Electric Static 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 RAID card 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.

General Safety Guidelines

- Always disconnect power cables before installing or removing any components from the computer, including the SAS-816A Backplane.
- Disconnect the power cable before installing or removing any cable from the SAS-816A Backplane.
- Make sure that the SAS-816A Backplane is securely and properly installed on the motherboard to prevent damage to the system due to power shortage.

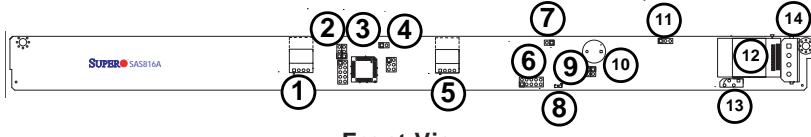
An Important Note to the User

- 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've received may or may not look exactly the same as the graphics shown in this manual.

2. Jumper Settings and Pin Definitions

A. Front Connectors and Jumpers

A-1 Front Jumper/Connector Locations



Front View

A-2. Front Connector and Jumper Descriptions

- #1. J9: CD-ROM/Floppy PWR Connector
- #2. JP33: I²C Controller ID (Jumper)
- #3. JP34: I²C Backplane ID (Jumper)
- #4. JP40: I²C Reset (Jumper)
- #5. J10: CD-ROM/Floppy PWR Connector
- #6. JP26: Activity LED Header
- #7. JP50: I²C Reset (Jumper)
- #8. D3: Overheat/Drive Fail LED
- #9. JP18: Buzzer Reset, if short (Jumper)
- #10. JP29: MG9071 Reset, if short (Jumper)
- #11. JP42: I²C Backplane ID (Jumper)
- #12. JSM1: SAS In Connector
- #13. JP44: I²C Connector
- #14. JP10: Backplane Main PWR

A-3. Front Connector Pin Definitions

1. Backplane Main Power Connector (JP10) Pin Definitions

You must use the 4-pin power connector: JP10 (marked "#14" on the layout above) to provide adequate power to the Backplane. See the table on the right for pin definitions.

**Backplane Main PWR
4-pin Connector (J10)**

Pins #	Definition
1	+12 V
2 & 3	Ground
4	+5V

2. CD-ROM/Floppy Drive Power Connectors and Pin Definitions

You must use the 4-pin power connectors: J9, J10 (marked "#1" and "#5" on the layout above) to provide power to the CD-ROM and Floppy Drives. See the table on the right for pin definitions.

**CD-ROM/FDD PWR
4-pin Connectors (J9, J10)**

Pins #	Definition
1	+5 V
2 & 3	Ground
4	+12V

3. SAS-In Connector: JSM1(#12)**4. I²C Connector: JP44 (#13)****5. Activity LED Header: JP26 (#6)**

The Activity LED Header, located at JP26 on the front panel, transmits signals to indicate the activity status of each SAS slot. For the Activity LED Header to work properly, please connect a 4-pin LED cable to Pin 1 to Pin 4 of JP26 as shown on the right. See the table in Section A-5 for pin definitions.

JP26
SAS Activity LED

Pin#	Pin#	
Act In#0	1	6 NC
Act In#1	2	7 NC
Act In#2	3	8 NC
Act In#3	4	9 NC
NC	5	Empty

(*Note 1: "NC"=No Connection,

Note 2: Connect a 4-pin LED cable to Pin1-Pin 4 of JP26 only.)

A-4 Front Overheat/Drive Failure LED Indicator: D3 (#8)

Front LED	State	Specification
D3 (Front)	On	Overheat or Drive Failure

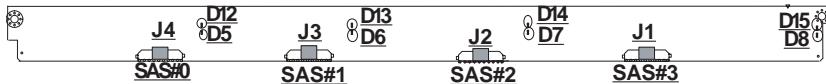
A-5 Front Panel Jumper Settings and Pin Definitions

Jumper	Description	Definition
JP18	Open (*Default)	Normal
	Short	Buzzer Reset
JP26	Open (*Default)	Act #0-3 In
	1	Act In #0
	2	Act In #1
	3	Act In #2
	4	Act In #3
JP29	Open (*Default)	Normal
	Short	MG9071 Reset
JP33	1-2	I ² C Controller ID: GPIO
	2-3 (*Default)	I ² C Controller ID: I ² C
JP34	1-2 (*Default)	I ² C Backplane ID: ID#0
	2-3	I ² C Backplane ID: ID#1
JP40	Short	I ² C Reset: GPIO
	Open (*Default)	I ² C Reset: I ² C
JP42	1-2	I ² C Backplane ID: GPIO
	2-3 (*Default)	I ² C Backplane ID: I ² C
JP50	Open	I ² C Reset: GPIO
	Short (*Default)	I ² C Reset: I ² C (On)

B. Rear Connectors and LED Indicators

B-1 Rear Connector/LED Indicator Locations

Rear View



(*See below for rear connector/LED descriptions.)

B-2 Rear Connector/LED Indicator Descriptions

Connectors

Rear Connector	Specification
J4 (Rear)	SAS#0 HDD (connected to HDD)
J3 (Rear)	SAS#1 HDD (connected to HDD)
J2 (Rear)	SAS#2 HDD (connected to HDD)
J1 (Rear)	SAS#3 HDD (connected to HDD)

LED Indicators

Rear LED Indicators	Specification
D12 (Rear)	SAS#0 Activity LED
D13 (Rear)	SAS#1 Activity LED
D14 (Rear)	SAS#2 Activity LED
D15 (Rear)	SAS#3 Activity LED
D5 (Rear)	SAS#0 Fail LED
D6 (Rear)	SAS#1 Fail LED
D7 (Rear)	SAS#2 Fail LED
D8 (Rear)	SAS#3 Fail LED