

SUPER[®]



SAS 813TQ 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 813TQ Backplane.
- Disconnect the power cable before installing or removing any cable from the SAS 813TQ Backplane.
- Make sure that the SAS 813TQ Backplane is securely and properly installed on the motherboard to prevent damage to the system due to power shortage.

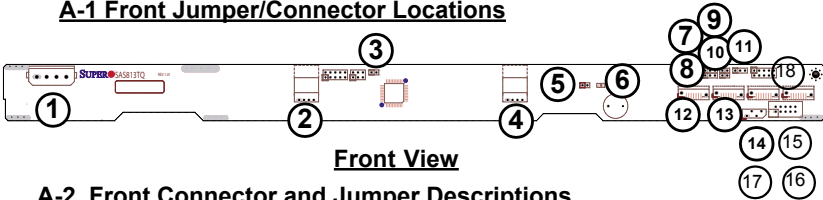
An Important Note to the User

- 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



A-2. Front Connector and Jumper Descriptions

- #1. JP10: Backplane Main PWR
- #2. J9: CD-ROM/Floppy PWR Connector
- #3. JP29: MG9071 Reset, if short (Jumper)
- #4. J10: CD-ROM/Floppy PWR Connector
- #5. JP18: Buzzer Reset, if short (Jumper)
- #6. D3: Overheat/Drive Fail LED
- #7. JP33: I²C Controller ID (Jumper)
- #8. JP34: I²C Backplane ID (Jumper)
- #9. JP40: I²C Reset (Jumper)
- #10. JP50: I²C Reset (Jumper)
- #11. JP42: I²C Backplane ID (Jumper)
- #12. J8: SAS #3
- #13. J7: SAS #2
- #14. J6: SAS #1
- #15. J5: SAS#0
- #16. JP26: Activity LED Header
- #17. JP44: I²C Connector
- #18. JP51: Sideband Header

A-3. Front Connector Pin Definitions

1. Backplane Main Power Connector (JP10) Pin Definitions

You must use the 4-pin power connector: JP10 (marked "1" 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 JP10**

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

2. CD-ROM/Floppy 4-pin Power Connectors (J9, J10) Pin Definitions

You must use the 4-pin power connectors: J9, J10 (marked "2" and "4" 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)**

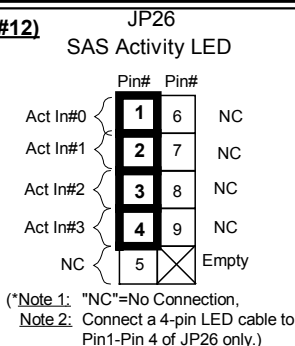
Pins #	Definition
1	+5 V
2 & 3	Ground
4	+12V

3. SAS Connectors #0-#3: J5-J6 (#15,#14,#13,#12)

4. I²C Connector: JP44 (#17)

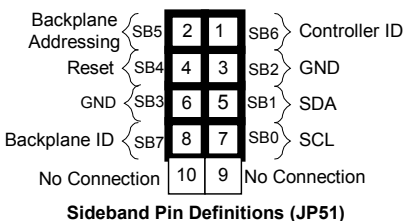
5. Activity LED Header: JP26 (#16)

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.



6. Sideband Header: JP51 (#18)

The Sideband Header is located at JP51 on the front panel. For SAS-II to work properly, please connect an 8-pin Sideband cable to JP51 as shown on the right. See the table for pin definitions.



A-4 Front Overheat/Drive Failure LED Indicator: D3 (#6)

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

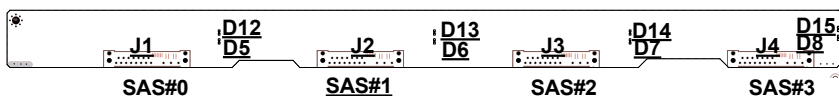
A-5 Front Panel Jumper Settings and Pin Definitions

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: SGPIO
	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: SGPIO
	Open (*Default)	I ² C Reset: I ² C
JP42	1-2	I ² C Backplane ID: SGPIO
	2-3 (*Default)	I ² C Backplane ID: I ² C
JP50	Open	I ² C Reset: SGPIO
	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

Rear Connectors

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

Rear 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