

CHENBRO

4-Port Mini-SAS Backplane

80H10220918A0

User's Manual

Sep / 15 / 2010

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Technical Support

Chenbro works hard to offer our customers maximum performance from our chassis. But in case you have any problem with our product you can find supports from the following resources.

Web Support

Detail information of our products is in our website. You can find technical updates, installation guides, FAQs, technical specifications and more. Our web address is: www.chenbro.com.

Email Support

You can also fill out the technical support form at our [Technical Support](#) page. Your technical issue inquiries will be sent directly to our support professionals.

Phone Support

You can also contact Chenbro HQ or branch office for immediate support; contact information is as following:

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Tel: 886-2-8226-5500	Tel: 31-40-295-2045	Tel: 1-909-947-3200
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Revision History

Date	Modifications
Sep / 15 / 2010	● First Release

Backplane Specification

Hardware Specification

Host Interface	Mini-SAS
HDD Interface	SAS (22+7) and SATA compatible
Hot-Swap	Yes, allows user to replace Hard Disk Drive (HDD) on line
Display	LED indicates HDD status (Defined by Chenbro) Power LED – Blue (When HDD is present) Access LED –Green (When HDD is busy) Error indicator – Red (Error when retreating signals)
Cooling	Two Fan connectors
Environment Monitor	Fan speed and temperature detect
Connectors	Mini-SAS x1 to host SAS (22+7) x4 (for HDD) Standard 4P Power connector x 2 (+5V & +12V from power supply)
Dimensions	114.8 (Length) x 107.8 (Width) x 2.4 (Thickness) mm

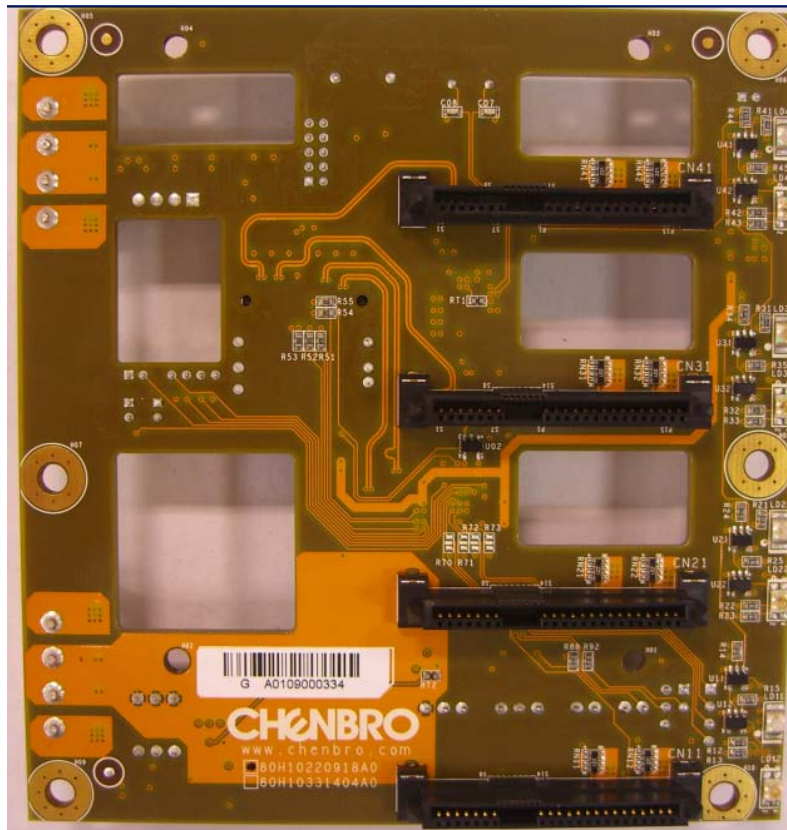
Accommodated Chassis

This backplane can be applied to the Chassis as below:

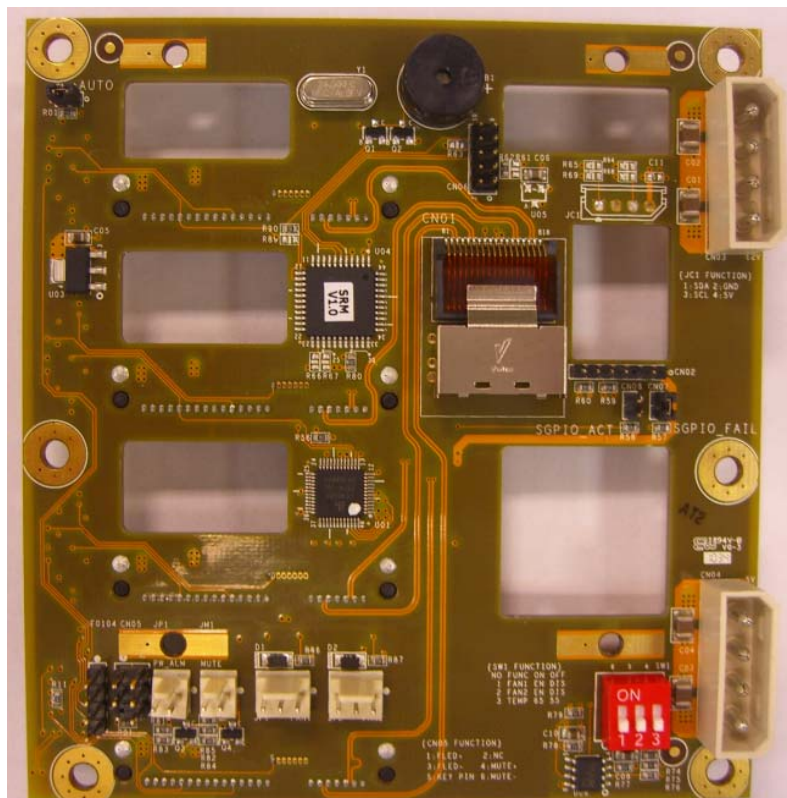
- SR105 / SR107 / SR108 / SR209

Backplane Photos

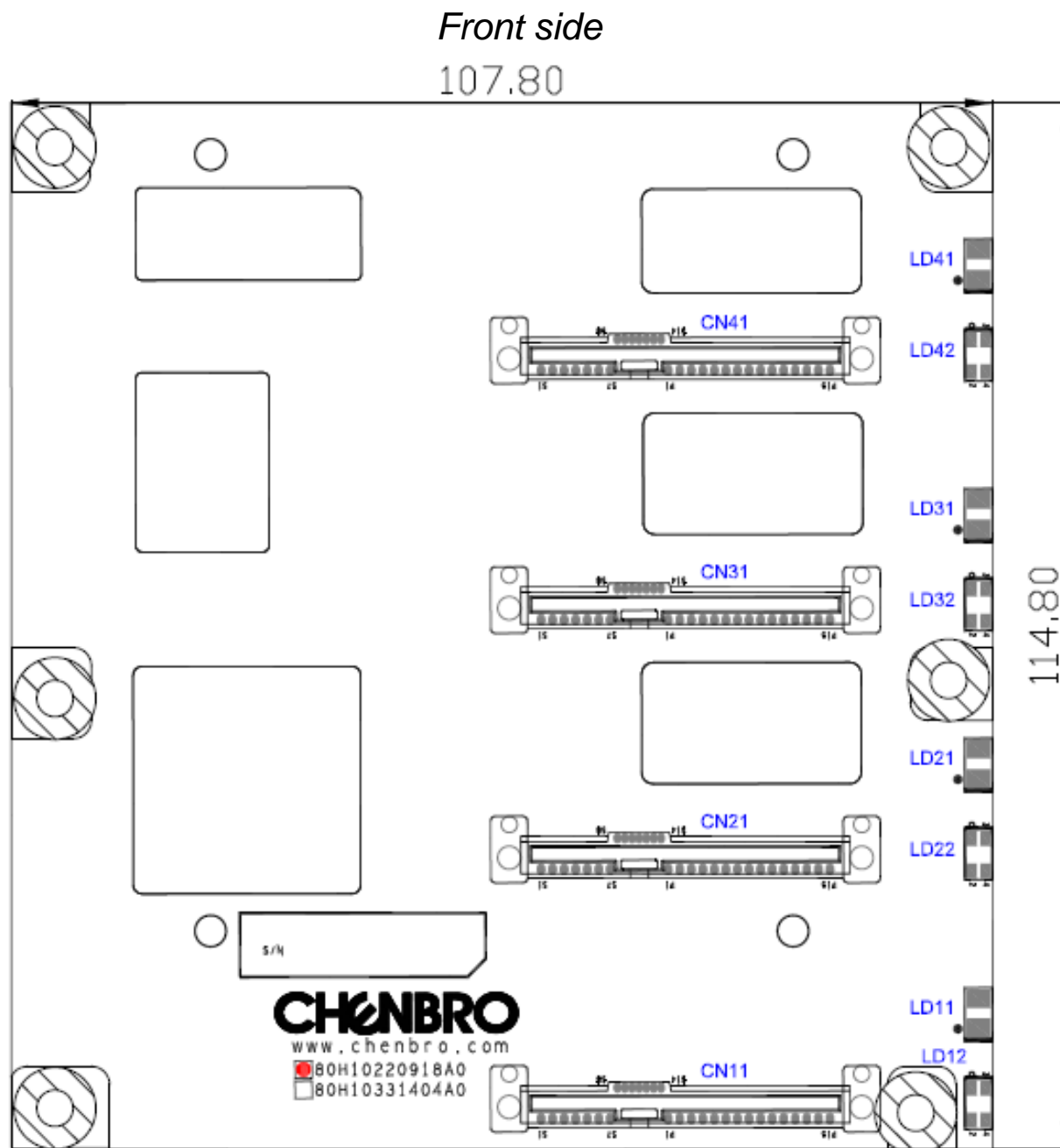
Front side



Rear side

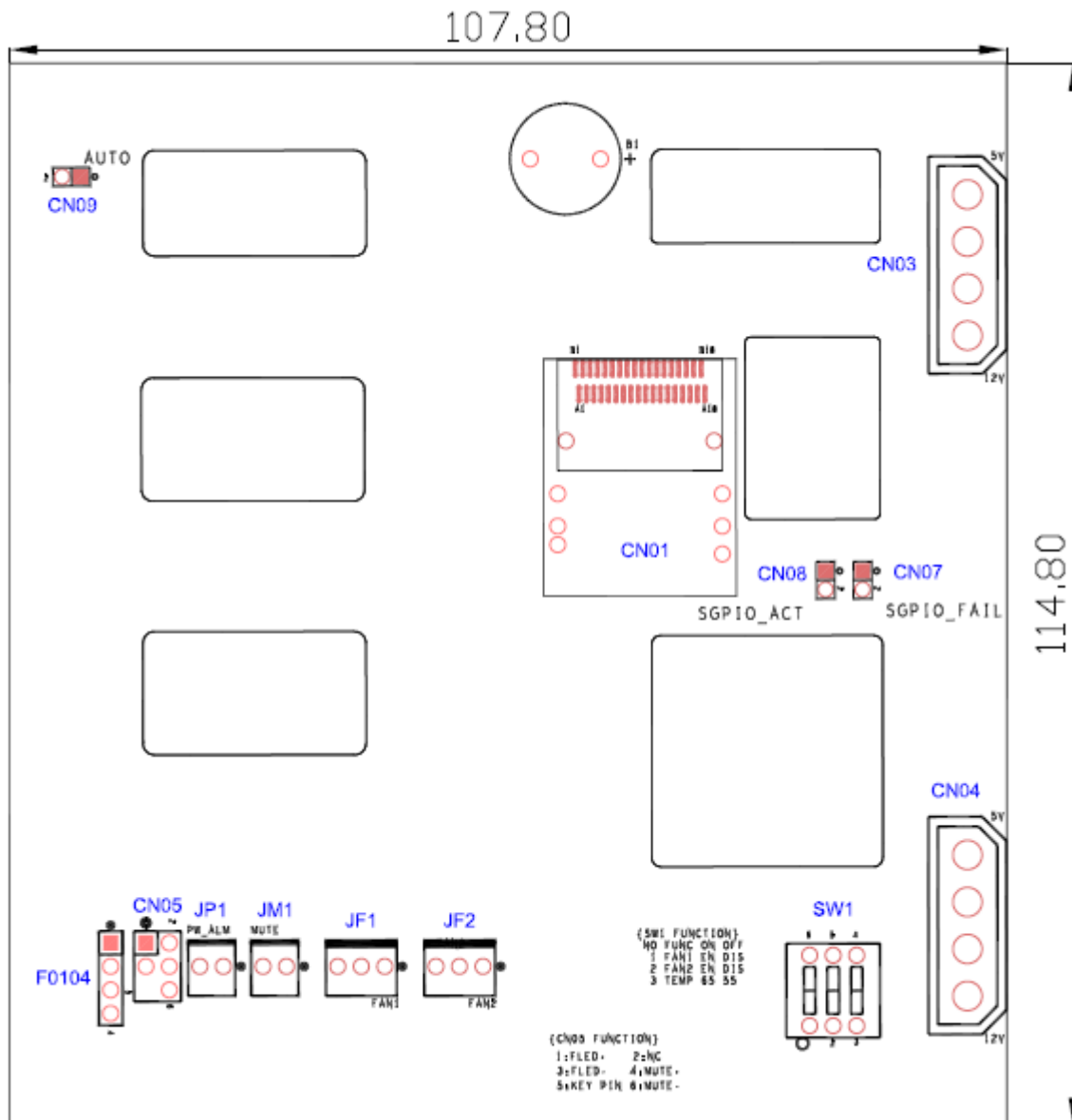


Backplane Layout



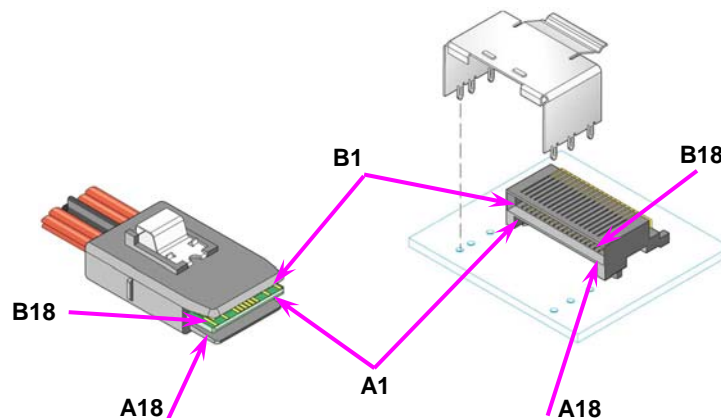
1. [CN11 / CN21 / CN31 / CN41]: Connect to 22-pin SATA-II or 29-pin SAS HDD
2. [LD11 / LD21 / LD31 / LD41]: Blue LED Indicate HDD Power
3. [LD12 / LD22 / LD32 / LD42]: Green LED Indicate HDD Activity, Red LED Indicate HDD Failure

Rear Side



4. [CN01]: Mini-SAS connector

Pin Definition: SFF-8087 Mini-SAS 36-pin cable plug and receptacle connectors



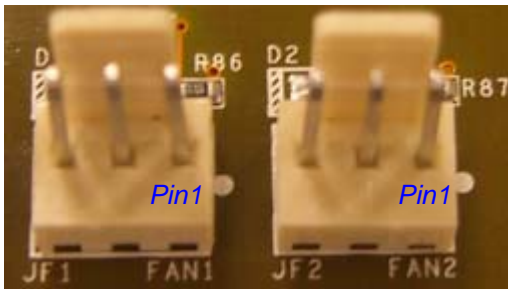
Sideband Definition: The following table defines the SGPIO signal assignments for the Mini-SAS receptacle connector

Pin Number	Pin	Signal
A8	Sideband 0	SClock
A9	Sideband 1	SLoad
A10	Sideband 2	Ground
B9	Sideband 3	Ground
B10	Sideband 4	SDataOut
B11	Sideband 5	SDataIn
A11	Sideband 6	Reserved
B8	Sideband 7	*SGPIO Enable / Disable

5. [CN03 / CN04]: 4-pin power connectors



6. [JF1 / JF2]: 3-pin Fan1 & Fan2 connectors



7. [JP1]: Power failure input (To Redundant Power Supply)



8. [JM1]: Power failure alarm mute output (To Redundant Power Supply)



9. [F0104]: Discrete HDD fail LED signal input connector (from RAID Card)



10. [CN05]: Fan / Power / Temperature fail LED output connector (To front panel LED display)



Pin	Definition	Function
1	LED (+)	FAN / Power / Temp Fail LED
2	N/A	
3	LED (-)	FAN / Power / Temp Fail LED
4	Buzzer Mute (+)	
5	Key Pin	
6	Buzzer Mute (-)	

11. [CN07]: SGPIO HDD fail function jumper
[CN08]: SGPIO HDD access function jumper



CN07	CN08	SGPIO	Pin B8 Signal
Close	Close	Enable HDD failure and activity signal via SGPIO	Low
Close	Open	Enable HDD failure signal via SGPIO (Default)	Low
Open	Close	Enable HDD activity signal via SGPIO	Low
Open	Open	Disable HDD failure and activity signal via SGPIO	High








12. [SW1]: Function switch



Function	Fan1	Fan2	Temp
Pin	1	2	3
ON	Enable	Enable	65
OFF	Disable	Disable	55

13. [CN09]: Auto detection

Photo	Jumper	Function	Description
	Closed	Enable	identify SAS or SATA HDD from Host
	Opened	Disable	can't identify SAS or SATA HDD from Host

	<i>Mini-SAS Cable</i>
	<i>Fan cable</i>
	<i>standard big 4pin power</i>
	<i>HDD Fail LED Signal Input</i>
	<i>Fan / Power / Temperature Fail LED output</i>
	<i>Power failure input</i>
	<i>Power Failure Alarm Mute Output</i>